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United States  
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TFS-248  
November 1988

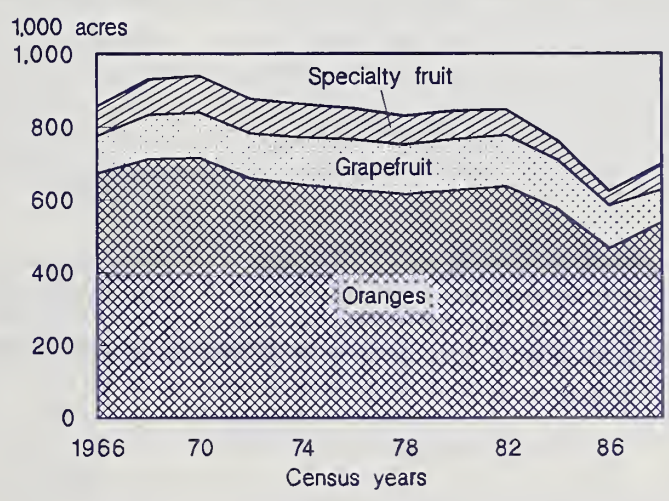
# Fruit and Tree Nuts

## Situation and Outlook Report

24

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Fruit and Tree Nuts  
November 1, 1988  
Economic Research Service  
United States Department of Agriculture

**Florida Commercial Citrus Acreage**





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Approved by the World Agricultural Outlook Board.  
Summary released November 7, 1988. The next summary of  
the Fruit Situation and Outlook is scheduled for release in  
March 1989. Summaries and full Situation and Outlook  
reports, including tables, may be accessed electronically.  
For details, call (202) 447-5505.

The Fruit Situation and Outlook is published three times a  
year and supplemented by a yearbook. Subscriptions are

available from the Economic Research Service by calling  
(301) 953-2515 or writing USDA/ERS, Box 1608, Rock-  
ville, MD 20850. Rates: 1 year \$10, 2 years \$19, 3 years  
\$27. Foreign customers add 25 percent for subscriptions  
mailed outside the United States. Make checks payable to  
USDA/ERS.

Subscriptions also are available from the U.S. Govern-  
ment Printing Office.

## SUMMARY

Led by larger citrus supplies, the October index of grower prices for fresh and processing fruit fell fractionally after increases in the previous 2 months. Prices are reported lower than a year ago for grapefruit, lemons, oranges, and strawberries. Increases for apples and pears have been only partially offsetting. With supplies below year-earlier levels and stable demand from the healthy economy, noncitrus prices are expected to remain above last year's relative low. In contrast, increased citrus supplies should keep prices under year-earlier levels this winter, barring a freeze in producing areas.

U.S. citrus production for 1988/89 (excluding grapefruit in California's "other areas") is forecast at 13.5 million short tons, up 8 percent from 1987/88 and 15 percent from 1986/87. Although the crop continues to recover from the early-1980's freezes in Florida and Texas, it is still well below its record outturn of 16.5 million short tons in 1979/80. As of October 1, larger crops were indicated for all citrus except tangelos.

The U.S. orange crop is forecast at 217 million boxes, 10 percent above last season. This would be the largest crop in 5 years, but still 22 percent below the 1979/80 record. Larger crops are expected for all producing States: Florida, up 10 percent; California, up 8 percent; Texas, up 15 percent; and Arizona, up 33 percent.

On-tree orange returns in October averaged well below a year ago, primarily reflecting increased supplies of California valencias. With large valencia supplies from 1987/88 and seasonally rising supplies from 1988/89, fresh orange prices are likely to remain weak this fall and early winter. In addition, as f.o.b. prices for frozen concentrated orange juice (FCOJ) are likely to fall in light of larger Florida orange production and sluggish movement, prices for Florida processing oranges are also likely to weaken. Overall orange prices could drop below last year's high, but may be moderated by reduced supplies of apples and pears.

The bigger Florida orange crop will result in increased FCOJ production in 1988/89, even though the juice yield is estimated to be slightly lower than last season: 1.52 gallons per box at 42.0 degrees Brix, down from a record 1.55 gallons. Carryin FCOJ stocks for 1988/89 are likely to be below a year ago. However, Florida's supplies will not be adequate to meet domestic demand. Consequently, FCOJ imports, mostly from Brazil, will remain relatively large, but likely below 1987/88.

The 1988/89 output of FCOJ in Brazil is forecast at 245 million gallons (42 degrees Brix), about the same as last season. However, with smaller carryin stocks, Brazil's total FCOJ supply is forecast at 258 million gallons, down 4 per-

cent from last season. Brazil's current minimum export price for FCOJ is \$1,895 per metric ton, compared with \$1,300 a year ago.

Florida f.o.b. prices for FCOJ had been steady over the past several months, ranging between \$5.28 and \$5.74 a dozen 6-ounce cans, compared with \$4.76 a year earlier. Florida packers have recently offered price discounts for retail packaged FCOJ (unadvertised brand). With the prospect of an increase in Florida FCOJ pack in 1988/89 to nearly 183 million gallons, and sluggish movement, FCOJ prices for consumer-size packages may fall some more this winter, barring a freeze.

The 1988/89 U.S. grapefruit crop, excluding California's "other areas," is forecast at 66.7 million boxes, 5 percent more than the 1987/88 season. Production has been increasing in both Florida and Texas, with a record crop projected in Florida—up 6 percent from 1987/88 and 4 percent from the previous record in 1979/80. The Texas crop is expected to be 18 percent larger. Production in the California desert and Arizona is declining.

Early-season prices for grapefruit were mixed, but should fall with increased shipments this winter. Domestic consumer demand for fresh grapefruit will probably be stable because of the healthy economy. However, movement of processed grapefruit products has been sluggish because of higher prices.

Export markets for fresh grapefruit are expected to stay strong, given the weak dollar and increased promotional activities. Increased exports to Japan, the leading U.S. customer, are likely to continue under the U.S.-Japan Trade Agreement, which reduces Japanese tariffs on imports of U.S. fresh grapefruit.

The 1988/89 Arizona-California lemon crop (tree crop available for harvest) totals 22.7 million boxes, 10 percent above last season but 21 percent below 1986/87. Early-season f.o.b. prices were significantly higher than a year earlier, but increased shipments lowered prices in mid-October to levels well below the year before. The larger supplies should continue depressing prices.

The 1988 noncitrus crop—including major tree fruits, grapes, and cranberries—is forecast at 13.1 million short tons, down 10 percent from 1987 but still 7 percent above 1986. Most of the decline was the result of sharp dropoffs in the apple and pear crops, off 23 and 15 percent, respectively. With anticipated stable demand, noncitrus prices are likely to be higher than a year earlier.



*World production of most tree nuts* is lower this year, but large supplies continue. Prices are expected to continue strong and will likely average higher than a year ago as demand continues to expand.

U.S. production of almonds, walnuts, and filberts is lower this year, but world supplies are up due to large carryout

## PROFILE OF CHILE

Chile is a leading supplier of fresh fruit to North America and Europe during the Northern Hemisphere's winter months. In 1973, exports of grapes, apples, pears, peaches, nectarines, and plums accounted for 3 percent of Chile's total exports; in 1987 that figure was 9.5 percent. These products made up 67 percent of total agricultural exports in 1987. While the country's primary competitors are South Africa, Australia, and Argentina, Chile has surpassed them in capturing shares of the U.S. and European markets.

Several factors have contributed to the growth of Chilean agriculture. The government has followed free-market policies over the past 15 years, including the elimination of price controls and, since 1983, the maintenance of competitive foreign exchange rates. Tax laws and incentive programs were instituted to benefit the agricultural sector.

The international financial crisis of the late 1970's and 1980's left Chile with a foreign debt of \$19 billion, one of the highest, on a per capita basis, in South America. In order to pay its debts, Chile needed to increase exports. The government aimed to break Chile's traditional dependence on copper exports, which at one time accounted for almost 90 percent of foreign income, by focusing on agricultural markets. The U.S. market was methodically targeted and researched. Appropriate varieties were planted and cultivated, and refrigerated storage and handling facilities were built.

Chile's economy is currently one of the soundest in South America. This year's growth will be about 5 percent, the budget is balanced, and exports have grown from \$3.8 billion in 1985 to a projected \$6 billion for 1988. Inflation has been declining in recent years, and is forecast at between 10 and 15 percent for 1988.

Foreign investment has helped strengthen the Chilean economy. In 1987 investment exceeded \$1 billion. This money enters Chile as a result of its debt-equity swap program, which has reduced foreign debt by almost \$1 billion. There are other programs of this type in Latin America, but this is among the most successful.

While Chile's economy, on a macro scale, is sound, its growth has scarcely benefited poor Chileans, approximately

stocks. Domestic and export demand is strong and prices are generally higher than a year ago. Exchange rates continue to make U.S. tree nuts favorably priced. U.S. production of macadamia nuts, pecans, and pistachios is expected to be higher in 1988. The new crop of macadamias is sold out, while pistachios are virtually sold out in spite of record supplies.

45 percent of the population. The minimum monthly wage is \$48—one of the lowest in Latin America.

### *Fruit Exports*

Chile's primary fruit exports are grapes and apples, accounting for slightly more than 80 percent of the total. Chile also exports significant quantities of nectarines, plums, pears, and peaches. Data from the Exporters Association of Chile indicate that export volume of these six fruits is up 35 percent in the 1987/88 season from 1985/86. This is despite the fact that the 1987/88 data include only those exports from September 1 to April 30. The grape, apple, plum, and pear seasons all run through either May or June. By the end of the 1988 season, the volume of Chile's fruit exports will have exceeded that of 1985/86 by more than 35 percent.

The United States and Europe are Chile's biggest fruit markets, during the Northern Hemisphere's winter and early spring, although the Middle East also receives significant quantities of Chilean fruit. The United States is the biggest market for grapes, nectarines, plums, and peaches, whereas Europe receives the bulk of the apple and pear exports. The United States received 71 and 68 percent, respectively, of Chilean grape exports in 1985/86 and 1986/87. Europe received 56 and 76 percent of Chile's apple exports in the same period.

While the United States is not Chile's primary market for apple exports, it does receive a significant and increasing volume. According to the U.S. Census trade data, in 1986 the United States imported 31,041 metric tons of fresh apples from Chile; in 1987, 43,020 tons or 0.8 percent of U.S. domestic production.

While most of Chile's grape production is sent to the United States, most shipments arrive during the winter, except for early and late in the season. This considerably lessens pressure on U.S. growers. From July 1 to May 30, 1987, the United States imported 189,726 metric tons of grapes from Chile; in the same period in 1988, 265,749 tons were imported.

The seasons for nectarines, plums, and peaches are shorter than those for apples and grapes. For this reason there is virtually no competition between U.S. and Chilean

growers for these markets. Pears have a longer season and there is some competition for the EC market.

An issue of some importance to U.S. fruit growers is that of Chile's practice of picking fruit before it is totally ripe. This leads to consumers buying fruit with a sour taste, which lowers the reputation of all fruit, not just Chilean fruit, and hurts both U.S. and Chilean growers. It must be mentioned, however, that Chile is not the only country in which early picking occurs.

## GENERAL FRUIT PRICE OUTLOOK

Reversing the price rises of the last 2 months, the October index of grower prices for fresh and processing fruit fell fractionally from September and was 5 percent below a year ago. Prices were reported lower than a year ago for grapefruit, lemons, oranges, and strawberries. Sharply higher prices for apples and pears were only partially offsetting. Prices are expected to decline further this fall when supplies increase seasonally. Larger citrus supplies are likely to keep this winter's prices below a year earlier (Table 1). However, with noncitrus supplies below year-earlier levels

Table 1.--Index of annual and quarterly prices received by growers for fresh and processing fruit, 1985-88

Year	Annual	1st	2nd	3rd	4th
1977=100					
1985	180	180	178	182	180
1986	170	154	161	190	176
1987	182	163	180	185	200
1988		166	178	176	1/ 185

1/ October's figure only.

SOURCE: Agricultural Prices, NASS, USDA.

and stable demand from the healthy economy, noncitrus prices should be above last year's low.

Retail prices of fresh fruit continued to rise in September, primarily because of higher orange prices. The BLS Consumer Price Index (CPI) for fresh fruit stood at 153.3 (1982-84=100) in September, 2.1 percent above August and 16.4 percent above a year ago. Over the first 9 months, retail prices of fresh fruit have averaged 6.8 percent above last year. In September, apple and banana prices fell, but prices for oranges and other fresh fruit rose. Compared with a year ago, retail prices were slightly to sharply above year-earlier levels for all fruits. With seasonal increases in supplies of citrus, apples, and pears, the CPI for fresh fruit is likely to drop this fall, but should remain above a year earlier (Table 2).

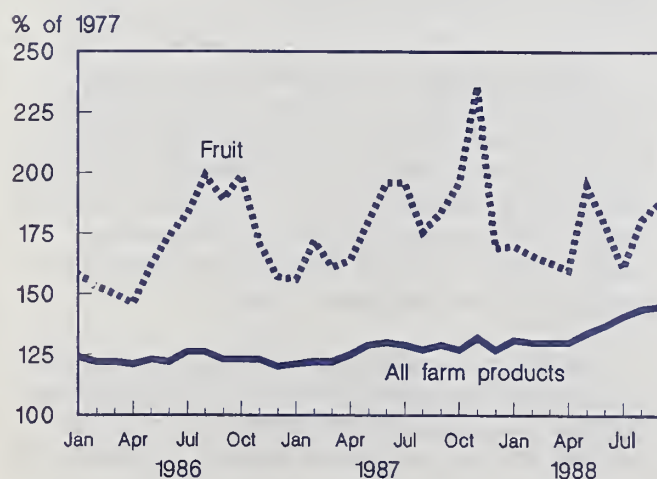
Retail prices of processed fruit have averaged 9.9 percent above a year ago during the first 9 months of this year. The CPI for processed fruit advanced to 123.8 (1982-84=100) in September, up 0.3 percent from August and 10.4 percent from a year ago. Retail prices of canned and dried fruit averaged 4.3 percent above a year earlier, while frozen fruit and juice were 12.1 percent higher (Table 3).

Table 2.--Annual and quarterly Consumer Price Indexes for fresh fruit, 1985-88

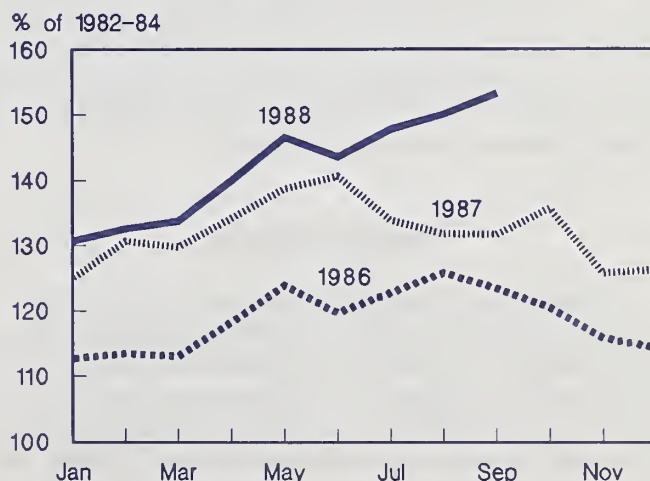
Year	Annual	1st	2nd	3rd	4th
1982-84=100					
1985	116	114	121	119	110
1986	119	113	121	124	117
1987	132	129	138	133	129
1988		132	143	150	

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

## Prices Received by Producers



## Fresh Fruit: BLS Consumer Price Index





## Canned Fruit: BLS Producer Price Index

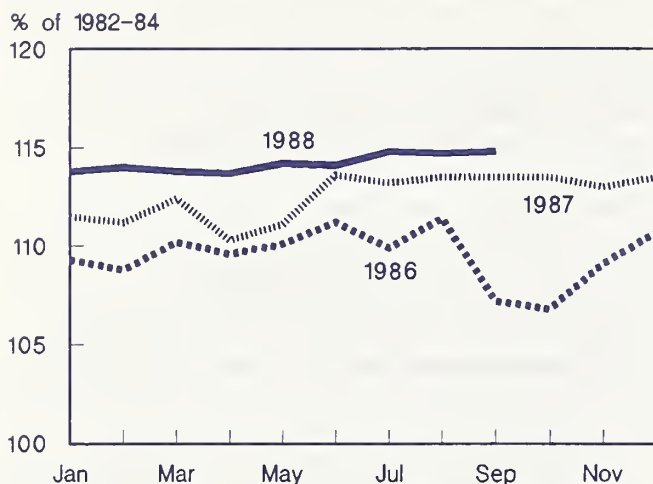


Table 3.--Annual and quarterly Producer Price Indexes for canned fruit, 1985-88

Year	Annual	1st	2nd	3rd	4th
1982-84=100					
1985	111	111	112	112	109
1986	110	109	110	110	109
1987	113	112	112	113	113
1988		114	114	115	

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

With canners' recent price hikes, retail prices of processed fruit are expected to rise. Supplies of most canned fruit will remain tight, and relatively strong demand will keep prices firm. Rising demand will also keep raisin prices high, while reduced supplies, higher field prices, and strong demand prospects will keep dried prune prices steady.

Frozen fruit and berry prices are likely to be mixed. Frozen cherry prices may advance somewhat in light of higher raw prices, even though supplies are still large. Frozen strawberry prices may hold steady because of lower raw berry prices and moderately larger supplies. FCOJ prices are likely to fall somewhat in view of expanded Florida production and sluggish movement.

## FRESH CITRUS

The first forecast of 1988/89 U.S. citrus production (excluding grapefruit in California's "other areas") is 13.5 million short tons, up 8 percent from 1987/88 and 15 percent from 1986/87. Although the crop continues its recovery from the early-1980's freezes in Florida and Texas, it is still well below the record 16.5 million short tons of 1979/80. As

of October 1, larger crops were forecast for all citrus except tangelos. Even with expected stable domestic demand and strong export markets, citrus prices are likely to fall below last year's high (Table 4).

## 1988 Florida Commercial Citrus Survey

Florida's Biennial Commercial Citrus Inventory, as of January 1988, indicated a significant gain in acreage, from 624,492 in 1986 to 697,929 in 1988. The first acreage inventory was taken in 1986 after the early-1980's freezes. The increase is the result of extensive new plantings in the southern areas, replanting of frozen blocks in the northern area, and resetting and interplanting in existing groves in all areas. In 1988, new plantings of citrus totaled 125,677 acres, compared with 48,725 in 1986 (Table 5).

The 1988 all-orange acreage is 536,737 acres, up 15 percent from 1986. Hamlin oranges are up dramatically at 151,665 acres, after the 1986 low of 115,789. This gain of nearly 31 percent represents 35,876 acres. Navel orange acreage, although very small, increased to 18,295, many of which are young trees. Valencia acreage at 224,868 also showed a strong gain, almost 9 percent. Bearing acreage for all oranges is 380,163, up 3 percent from the 367,581 acres reported in 1986. However, there is a 59-percent gain in non-bearing acres at 156,574 acres, compared with 98,671 acres in 1986.

Grapefruit shows a net increase of 1,761 acres in the past 2 years. White grapefruit acreage decreased slightly to 53,084, while colored acreage rose from 47,004 in 1986 to 51,443 in 1988. Seedy grapefruit are continuing to decline and are now at 8,903 acres, the fewest in many decades. Bearing acreage for all grapefruit is up only slightly.

Specialty citrus acreage is up slightly from 1986, but several types are lower. Temples, Dancy and Robinson tangerines, limes, and lemons all show reduced acreage. Increases are recorded for all tangelos and honey tangerines, but the other-citrus category, which includes sunburst tangerines, shows the largest gain.

Looking at acreage by regions, orange increases are recorded for all regions from 1986 to 1988, but the biggest rise is in the northern and southern regions, up 69 and 24 percent, respectively. Consequently, the share of Florida's total orange acreage increased from 6.4 to 9.4 percent in the northern region and from 22 to 23.6 percent in the southern region. Shares were down in the Indian River Market district, and the central and western regions.

Grapefruit acreage has increased in all regions except the central region. The Indian River Market district, the largest producing area, accounted for 65 percent of the total, the same as in 1986, but acreage increased only 1.5 percent. Be-



Table 4.--Citrus fruit: Production, 1986/87, 1987/88, and indicated 1988/89 1/

Crop and State	Boxes			Ton equivalent		
	Used		Indicated 1988/89	Used		Indicated 1988/89
	1986/87	1987/88		1986/87	1987/88	
	1,000 boxes 2/			1,000 short tons		
Oranges:						
Early, midseason, and Navel varieties 3/:						
California	34,500	31,500	35,000	1,294	1,182	1,313
Florida	65,800	78,500	89,000	2,961	3,532	4,005
Texas	500	940	1,100	22	40	47
Arizona	1,000	610	1,750	37	23	28
Total	101,800	111,550	125,850	4,314	4,777	5,393
Valencias:						
California	23,400	25,000	26,000	878	937	975
Florida	53,900	59,500	63,000	2,425	2,677	2,835
Texas	375	490	550	16	21	23
Arizona	1,700	1,200	1,650	64	45	62
Total	79,375	86,190	91,200	3,383	3,680	3,895
All oranges:						
California	57,900	56,500	61,000	2,172	2,119	2,288
Florida	119,700	138,000	152,000	5,386	6,209	6,840
Texas	875	1,430	1,650	38	61	70
Arizona	2,700	1,810	2,400	101	68	90
Total	181,175	197,740	217,050	7,697	8,457	9,288
Grapefruit:						
Florida all	49,800	53,850	57,000	2,116	2,288	2,422
Seedless	46,900	51,100	54,500	1,993	2,171	2,316
Pink	20,000	21,900	24,500	850	930	1,041
White	26,900	29,200	30,000	1,143	1,241	1,275
Other	2,900	2,750	2,500	123	117	106
Texas	1,925	3,800	4,500	77	152	180
Arizona	2,200	1,500	1,300	70	48	42
California	9,300	8,900	---	305	293	---
Desert Valleys	4,300	4,200	3,900	137	135	125
Other areas	5,000	4,700	(4)	168	158	(4)
Total	63,225	68,050	5/ 66,700	2,568	2,781	5/ 2,769
Lemons:						
California	21,500	17,000	18,500	817	646	703
Arizona	7,100	3,650	4,200	270	139	160
Total	28,600	20,650	22,700	1,087	785	863
Tangelos:						
Florida	4,000	4,200	3,900	180	189	176
Tangerines:						
Florida	2,340	2,450	2,700	111	117	128
Arizona	700	450	550	26	17	21
California	2,230	2,090	1,800	83	78	68
Total	5,270	4,990	5,050	220	212	217
Temples:						
Florida	3,400	3,550	3,800	153	160	171
Total citrus	285,670	299,180	5/ 319,200	11,905	12,584	5/ 13,484

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year. 2/ Net content of box varies. Approximated averages are as follows: Oranges-California and Arizona, 75 lbs.; Florida, 90 lbs.; Texas 85 lbs.; Grapefruit-California, Desert Valleys and Arizona, 64 lbs.; other California areas, 67, lbs.; Florida, 85 lbs.; Texas, 80 lbs.; Lemons, 76 lbs.; Tangelos, 90 lbs.; Tangerines-California and Arizona, 75 lbs.; Florida, 95; and Temples 90 lbs. 3/ Navel and miscellaneous varieties in California and Arizona. Early and midseason varieties in Florida and Texas, including small quantities of tangerines in Texas. 4/ The first forecast for California grapefruit "other areas" will be as of April 1, 1989. 5/ Excludes California grapefruit in "other areas".

SOURCE: Crop Production, NASS, USDA.

Table 5.--Commercial citrus acreage,  
Florida, 1966-1988

Census years	Oranges	Grape- fruit	Specialty fruit 1/	Total
Acres				
1966	673,086	103,224	81,772	858,082
1968	713,400	119,883	97,966	931,249
1970	715,806	124,050	101,615	941,471
1972	659,418	124,142	94,459	878,019
1974	642,431	130,326	91,341	864,098
1976	628,567	137,909	85,893	852,369
1978	616,020	136,342	78,873	831,235
1980	627,174	139,944	78,165	845,283
1982	636,864	139,939	71,053	847,856
1984	573,991	134,680	52,694	761,365
1986	466,252	117,845	40,395	624,492
1988	536,737	119,606	41,586	697,929

1/ Temples, tangerines, tangelos, lemons,  
limes and other citrus.

SOURCE: Florida Crop and Livestock Reporting  
Service.

cause of the freezes, grapefruit acreage in the northern region fell to 1,287 in 1986, accounting for only 1.1 percent of the total, compared with 12 percent in 1980. However, in the northern region, larger plantings have increased acreage by 60 percent, and the region's share rose from 1.1 percent in 1986 to 1.7 in 1988. The western and southern regions also increased slightly, but the central region was down from 17.4 to 16 percent.

Specialty citrus (including lemons, limes, tangerines, tangelos, and temples) acreage totaled 41,586 in 1988, up 3 percent from 1986. Most of the increase is in the northern region, up 48 percent. Slight increases were also recorded for the central and southern regions, but the western region and Indian River Market district fell slightly.

## Oranges

### *Substantially Larger Crop*

The first forecast of 1988/89 orange production is 217 million boxes, 10 percent more than last year and 20 percent above 1986/87. This would be the largest crop in the last 5 years, but still 22 percent below the 1979/80 record. The forecast for all Florida oranges is 152 million boxes, 10 percent more than last season and 27 percent above 1986/87, but 26 percent below the record 1979/80 crop. Production of Florida early and mid-season varieties, at 89 million boxes, is 13 percent greater than last season and 35 percent above 1986/87. Florida valencia production is expected to total 63 million boxes, 6 percent above last year and 17 percent above 1986/87.

California's 1988/89 all-orange forecast, at 61 million boxes, is 8 percent greater than last year and 5 percent above 1986/87. The California navel crop is expected to total 35 million boxes, 11 percent more than 1987/88 and 1 percent above 1986/87. California's valencia forecast, at 26 million

boxes, is 4 percent above last year and 11 percent larger than 1986/87. The Arizona all-orange crop is estimated at 2.4 million boxes, 33 percent more than last year but 11 percent below the 1986/87 crop. The Texas all-orange crop is expected to total 1.65 million boxes, compared with 1.43 million last year and .88 million in 1986/87.

### *Lower Prices Likely*

U.S. 1987/88 grower orange prices averaged \$6.70 a box, well above the previous season's \$5.40. Higher prices were reported for both fresh and processing uses, up 7 and 37 percent, respectively. Prices were higher in all producing States. Smaller California navel orange supplies strengthened prices for the fresh market, while higher FCOJ prices kept Florida processing orange prices high.

On-tree returns for U.S. oranges in October averaged sharply below a year ago, primarily reflecting greater supplies of California valencias. With more valencia supplies remaining from 1987/88 and seasonally increased 1988/89 supplies, fresh orange prices are likely to remain weak this fall and winter. In addition, f.o.b. prices for FCOJ are likely to fall, so Florida orange prices for processing use may fall below a year ago. However, reduced supplies of apples and winter pears may moderate declines for fresh oranges. The f.o.b. price for Florida fresh oranges in mid-October was \$8.75 a carton in the interior section, compared with \$8.77 a year ago.

### *Exports Down Significantly*

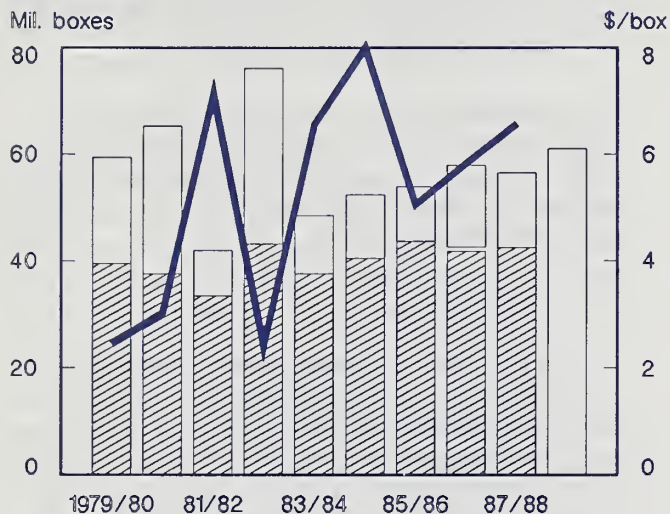
Exports of U.S. fresh oranges through August of the 1987/88 marketing year (November-October) totaled 303,712 metric tons (including Canada), down 16 percent from a year earlier, as reduced shipments were reported to all major destinations. Higher prices have weakened foreign demand. In addition, limited supplies of large fruit from this year's California valencia crop reportedly hindered exports.

Japan, the leading U.S. customer in 1986/87, has purchased a somewhat smaller quantity than a year ago. However, fresh orange exports to Japan could recover during 1988/89 because of an expanded import quota.

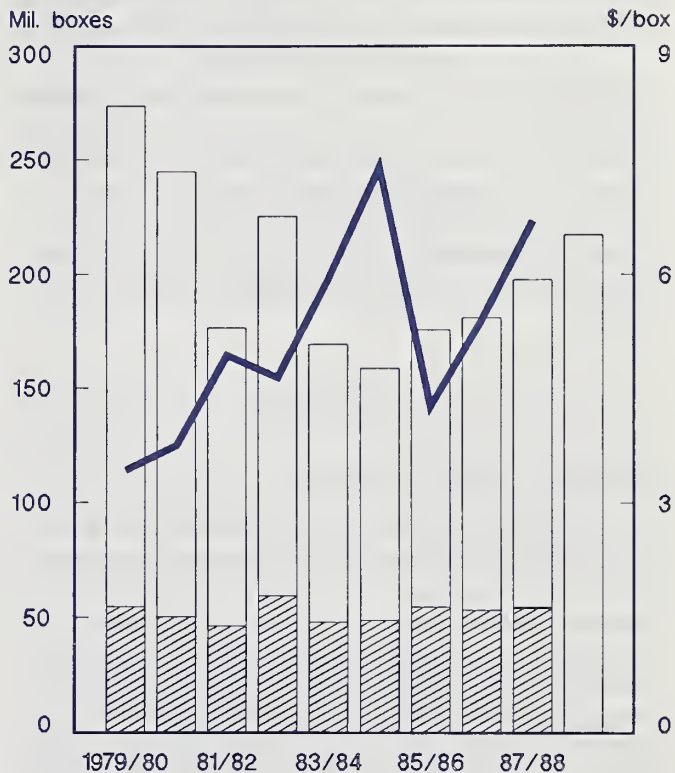
Sales to Hong Kong, the second largest U.S. customer in 1986/87, also fell, to 66,160 metric tons from 91,549 metric tons a year earlier. Consequently, shipments to the East Asia and Pacific region fell 13 percent from a year ago. Nevertheless, the share of total U.S. export sales to that region has increased from 67 percent in 1986/87 to 69 percent in 1987/88.

# Oranges: Production, Utilization, and Prices

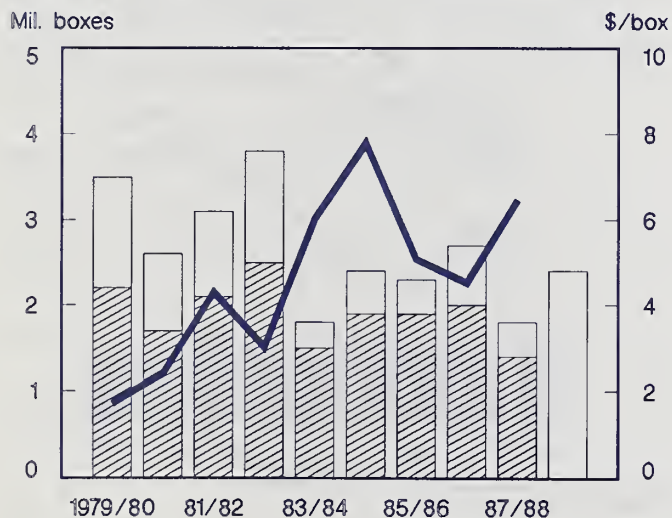
## California



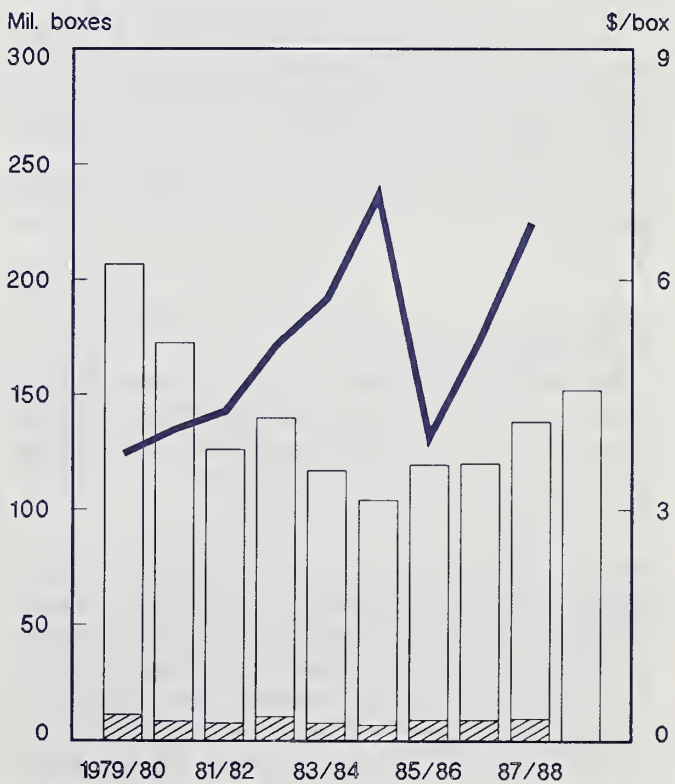
## United States



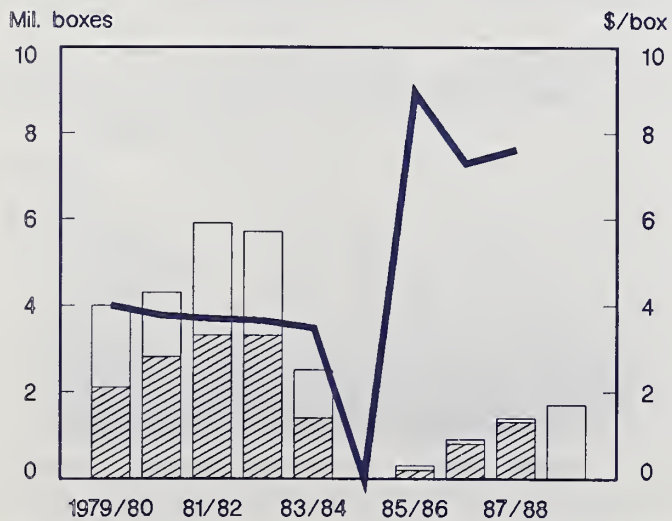
## Arizona



## Florida



## Texas



Year beginning October 1. \*Production having value. Prices: on-tree returns. 1988/89 data as of October 1, indication of total production.



The increase was attributed primarily to reduced purchases from the EC, off 22 percent from a year ago. Canada, the third leading importer of U.S. fresh oranges this season, has bought 85,965 metric tons, off 14 percent from a year ago. Prospects for U.S. orange exports will be favorable in 1988/89 because of anticipated lower prices, increased supplies, the weak dollar, and continued promotional activities.

In contrast, U.S. imports of fresh oranges have risen substantially this season. From November 1987 to August 1988, imports totaled 21,531 metric tons, up 11 percent from a year ago. Mexico, the leading exporter to the United States, reduced its sales by 23 percent. Imports from the Dominican Republic rose significantly. Those from Israel dropped because of damage from high winds, heavy rains, and hail.

## Grapefruit

### Moderately Larger Crop Likely

The 1988/89 U.S. grapefruit crop, excluding California's "other areas," is forecast at 667 million boxes, 5 percent above the previous season and 15 percent more than 1986/87. Florida's forecast is a record 57 million boxes, up 6 percent from the previous season and 4 percent above the previous record in 1979/80. The Florida white seedless grapefruit forecast is 30 million boxes, 3 percent above 1987/88; colored seedless is 24.5 million boxes, up 12 percent; and seedy grapefruit, at 2.5 million boxes, is 9 percent below last season.

The California desert grapefruit forecast is 3.9 million boxes, down 7 percent from last season. Output for California's "other areas" will be forecast on April 1, 1989. Arizona's forecast, at 1.3 million boxes, is down 13 percent from last season. Texas continues to recover from the December 1983 freeze through replantings, with the 1988/89 crop forecast at 4.5 million boxes, compared with 3.8 million last season.

### Prices Likely To Weaken

Reflecting strong demand, U.S. grapefruit prices received by growers for 1987/88 averaged substantially above the previous season. On-tree returns for all grapefruit, \$5.39 a box, were almost 9 percent above 1986/87, with fresh sales up 9 percent and processing use 7 percent higher.

Early-season prices for fresh grapefruit were mixed, but prices are expected to fall with increased shipments. The f.o.b. price for Florida pink grapefruit was quoted at \$6.39 per carton in Indian River in late October, compared with \$7.65 a year ago. Domestic demand for fresh grapefruit is likely to be stable in 1988/89 because of the healthy economy. Movement of processed grapefruit products has

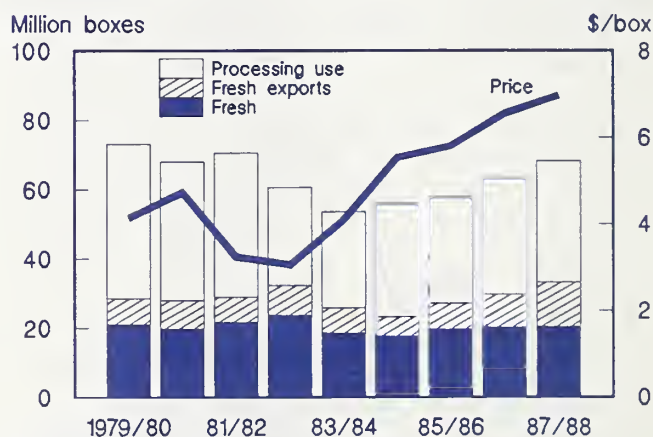
been sluggish because of higher prices, so processor demand does not look favorable. Export markets are expected to stay strong, given the weak dollar and increased promotional activities. Nevertheless, the moderately larger crop is expected to push grapefruit prices below a year ago.

Following higher grower prices, retail prices of fresh grapefruit averaged 51 cents a pound for the first 9 months of 1988, up slightly from a year ago. As supplies increase this fall and winter, prices will drop, but are not expected to be appreciably below a year ago.

### Export Prospects Favorable

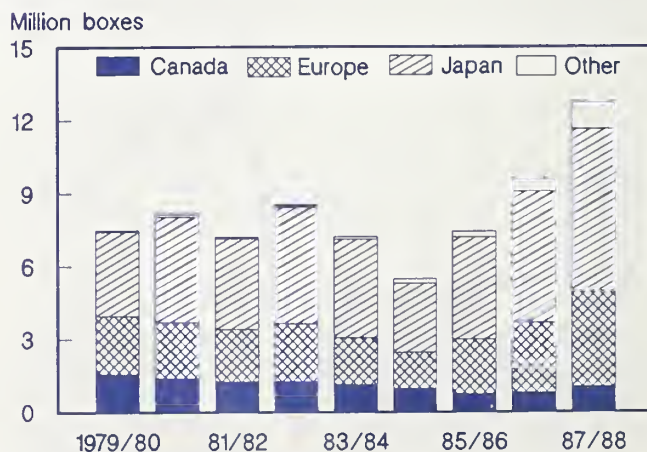
During 1987/88, U.S. exports of fresh grapefruit totaled 461,976 metric tons, up 33 percent from the preceding year as sharp increases were indicated for all major destinations. Japan, the leading customer, boosted its purchases by 24 percent. As a result, shipments to the East Asia and Pacific

## U.S. Grapefruit Production, Use, and Prices



Price: season-average packing house-door returns.  
Season beginning September.

## U.S. Exports of Fresh Grapefruit



Season beginning September.

region rose 32 percent. Purchases from the EC increased 38 percent, with France—the leading customer—taking 4 percent more than the preceding year. The Netherlands, the second leading customer, bought 20 percent more. Shipments to Canada were strong, up 30 percent from last year.

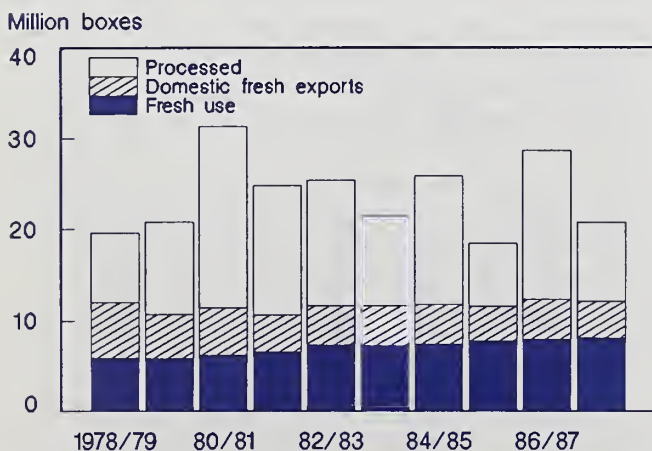
Export prospects are bright. The weak dollar, larger supplies, lower prices, and increased promotional activities under the Targeted Export Assistance (TEA) program are likely to keep export markets strong. In addition, increased exports to Japan are likely to continue under the U.S.-Japan trade agreement, which reduces Japanese tariffs on imports of U.S. fresh grapefruit.

## Lemons

### Significantly Larger Production

The 1988/89 Arizona-California lemon crop (tree crop available for harvest) totals 22.7 million boxes, 10 percent above last year, but 21 percent below 1986/87. California expects a crop of 18.5 million boxes, 9 percent more than last year. Arizona's crop is forecast at 4.2 million boxes, 15 percent more than 1987/88.

### U.S. Lemon Production, Use, and Price



• Price: season-average packinghouse-door returns  
Year beginning August.

Despite the larger crop, movement through mid-October was behind last season's pace. The decrease was attributable to reduced shipments to processors; deliveries to the fresh market rose 2 percent. Export shipments were up from last season. Early-season f.o.b. prices were significantly higher than a year earlier, but increased shipments have weakened prices substantially. In mid-October, the f.o.b. price for fresh lemons was quoted at \$10.57, compared with \$12.71 a year ago. Larger supplies will push the season-average price down.

## Other Citrus Fruit

### Smaller Tangelo Production Likely

The 1988/89 Florida tangelo crop is forecast at 3.9 million boxes, down 7 percent from last season, 2 percent less than 1986/87, and 39 percent below the record 6.4 million boxes of 1979/80. However, prospects are encouraging because of replantings after the freezes in the early 1980's. According to the 1988 Florida Biennial Commercial Citrus Inventory, as of January 1988, 14 percent of tangelo acreage was nonbearing.

More tangelos go to processing outlets than to the fresh market. The processing share was 66 percent for both 1986/87 and 1987/88, compared with only 55 percent in 1985/86. Strong processor demand resulted in higher prices for both fresh and processing uses in 1987/88. On-tree returns for fresh sales averaged \$7.60 a box in 1987/88, compared with \$5.70 in 1986/87, while returns for processing use averaged \$4.08 a box, compared with \$2.97. Consequently, on-tree returns for all sales averaged \$5.07 a box, up 41 percent from the previous year. Prices may remain relatively strong during 1988/89 in light of the smaller crop, but larger supplies of Florida oranges may moderate any rises.

### Tangerine Crop Up Slightly

The 1988/89 U.S. tangerine crop is forecast at 5.05 million boxes, 1 percent above last year but 4 percent less than 1986/87. This forecast includes all varieties of tangerines, including Dancy, Robinson, and Honey in Florida, as well as production in California and Arizona.

The Florida forecast, at 2.7 million boxes, is 10 percent above 1987/88 and 15 percent larger than 1986/87. Bearing acreage is rising, but yields are lower. Production should increase further because of new plantings. California production is forecast at 1.8 million boxes, off 14 percent from 1987/88 and 19 percent from 1986/87. In contrast, the Arizona crop is estimated at 550,000 boxes, 22 percent larger than last year but 21 percent less than 2 years ago.



Last year's smaller crop resulted in reduced sales to both fresh markets and packers. However, market shares for both outlets remained unchanged. Lower supplies boosted prices. On-tree returns for the fresh market averaged 20 percent higher, while those for processing nearly doubled. Total on-tree returns averaged 26 percent above 1986/87.

### *Moderately Larger Temple Production Likely*

Florida's Temple forecast is 3.8 million boxes, 7 percent above the previous season and 12 percent higher than 1986/87. Rising acreage and higher yields account for the increase. Bearing acreage totaled 9,500 in 1987/88, compared with 9,400 in 1986/87, owing to new plantings. Nonbearing acreage has steadily increased.

Because of the larger 1987/88 crop and strong fresh demand, fresh use increased 23 percent in 1987/88 over the previous season. Fresh use accounted for 36 percent of the crop, compared with 31 percent in 1986/87, and boosted on-tree returns for fresh sales 36 percent and processing use 37 percent. On-tree returns for all sales averaged \$5.07 a box, up \$1.47 from 1986/87.

## PROCESSED CITRUS

### *Fresh and Processing Uses Both Rose in 1987/88*

Because of the larger crop and increased processing of Florida citrus, 8.4 million tons of U.S. citrus were processed in 1987/88, up 6 percent from 1986/87. The proportion of the crop used for processing rose from 66.4 percent in 1986/87 to 66.6 percent. Most of the increase came from oranges and grapefruit, up 12 and 5 percent, respectively.

A larger crop raised the proportion of Florida oranges used for processing from 92.6 percent in 1986/87 to 93.1 in 1987/88. In contrast, a smaller California crop resulted in a 13-percent decrease in processing use, and the proportion fell from 28 percent in 1986/87 to 25 percent in 1987/88. Likewise, oranges used for both fresh and processing in Arizona fell in 1987/88 as a result of the smaller crop. However, in Texas, the continued rise in production after the 1983 freeze has increased both fresh and processing uses. The quantity used for processing increased 71 percent from 1986/87, and the proportion used for processing rose from 10.3 percent in 1986/87 to 10.8 percent in 1987/88.

A larger crop and rising demand for juice increased the quantity of Florida grapefruit used for processing. However, strong export demand caused substantially larger sales for fresh use. Consequently, the share of grapefruit used for processing fell from 58 percent in 1986/87 to 57 percent in 1987/88. California's processing use dropped 12 percent from 1986/87, and the share of grapefruit for processing fell from 37 percent in 1986/87 to 30 percent in 1987/88. Texas' grapefruit production has kept climbing, up 97 percent from 1986/87. As a result, sales for processing use increased 174 percent, and the proportion rose from 19 percent in 1986/87 to 27 percent in 1987/88.

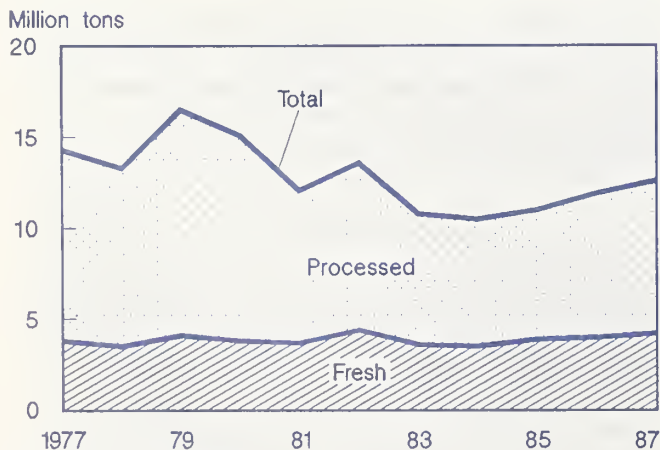
A smaller lemon crop and high stocks of processed products contributed to reduced utilization for processing. Lemons for processing use in Arizona fell 65 percent from 1986/87 to 1987/88, and the proportion for processing dropped from 67 percent to 46 percent. California lemons for processing were off 40 percent, and the proportion went down from 54 to 41 percent. Overall, 42 percent of the 1987/88 U.S. lemon crop was used for processing, down from 57 percent in 1986/87.

### *Smaller Carryover Stocks Of FCOJ Expected*

Because of the record juice yield and the larger Florida orange crop, Florida's 1987/88 production of FCOJ totaled 170 million gallons, up 18 percent from the previous season. Processors recovered 1.55 gallons of FCOJ per box at 42 degrees Brix, compared with 1.51 in 1986/87. The larger pack and carryin stocks have weakened imports into Florida and the United States as a whole to levels well below a year ago. According to the Florida Citrus Processors Association, imports into the State (mostly from Brazil) totaled 46.4 million gallons (42 degrees Brix) through mid-October, down 25 percent from a year earlier. However, the 1987/88 Florida supply of FCOJ is expected to be somewhat above last season's 265 million gallons.

Movement of Florida FCOJ has been running ahead of last year's pace, due mostly to increased bulk movement. Some bulk FCOJ is reprocessed into chilled orange juice

## Citrus Fruit Production and Utilization



Beginning crop year indicated.



(COJ) because of strong consumer demand. Higher prices and increased competition from COJ have weakened demand for consumer-size FCOJ packages. Movement of FCOJ in retail gallons through mid-October was running almost 10 percent below a year ago. Through mid-October, total movement of Florida FCOJ was 197.6 million gallons (excluding products delivered in fulfillment of future contracts), up 3 percent from a year ago.

Following promotions this summer, f.o.b. prices were steady, ranging between \$5.28 and \$5.74 a dozen 6-ounce cans, Florida canneries, because some packers did not extend prices for the promotional allowance beyond July 22. This compares with \$4.76 a year earlier. However, in the wake of the unexpectedly larger orange crop estimate, Florida packers have offered discounted prices for retail-package FCOJ, unadvertised brand. FCOJ export demand is likely to benefit from the increase in Japanese import quota to 15,000 metric tons in Japanese fiscal year (JFY), 1988/89 from 8,500 metric tons in 1987/88 negotiated under the U.S.-Japan Trade Agreement.

The higher Florida prices are mostly attributed to price hikes by Brazil during the 1987/88 season. Brazil raised FCOJ prices from \$1,995 to \$2,020 per metric ton (f.o.b. Santos) on August 26. The increase was mostly due to tight juice stocks at the end of the 1987/88 season (July-June), and low juice ratios and slower-than-normal crush at the beginning of 1988/89. Brazil lowered its FCOJ price to \$1,845 on October 12, but raised it to \$1,895 in late October. This compares with \$1,300 a year earlier.

FCOJ stocks as of October 15 were fractionally above a year ago. It appears that carryover stocks could be slightly to moderately below the 40 million gallons of last season. With the prospects of increased FCOJ pack during 1988/89 and the sluggish movement, consumer-packed FCOJ prices may fall some more during the winter, barring a freeze.

The larger Florida orange crop and relatively high juice yield will result in increased output of FCOJ, near 183 million gallons in 1988/89. The 1988/89 juice yield is forecast at 1.52 gallons a box at 42.0 degrees Brix. But, even with the increased pack and relatively large carryin, the 1988/89 domestic FCOJ supply will not be adequate to meet domestic demand. Consequently, imports (mostly from Brazil) will remain relatively large, but likely below 1987/88.

Orange juice production for 1988/89 in Sao Paulo, Brazil is forecast at 239.6 million gallons (42 degrees Brix), almost the same as the previous season. However, with carryin stocks of 13 million gallons, total Brazilian FCOJ supply is estimated at 258 million gallons, down almost 7 percent from 1987/88. Brazilian FCOJ exports during 1988/89 are forecast at 222 million gallons, down 13 percent from the previous season. The reduced export volume will result in greater juice inventories.

### *Frozen Concentrated Grapefruit Juice Demand Strong*

Florida packers processed 32 million gallons of frozen concentrated grapefruit juice (FCGJ) during 1987/88, up 11 percent from 1986/87 in response to strong demand. Increased pack and carryin stocks have pushed this season's FCGJ supply well above last season. Despite higher prices, movement has been relatively high, near last year's 25 million gallons through mid-October. The f.o.b. price has been steady at \$4.67 a dozen 6-ounce cans (private brand, Florida canneries), compared with \$4.30 a year ago. Even with good movement, the larger carryin and pack have kept stocks in mid-October well above a year ago.

With stocks higher than a year ago, FCGJ pack for 1988/89 may slow down somewhat. However, 1988/89 FCGJ supplies should be adequate to meet market demand. With the possibility of lower grapefruit prices, FCGJ prices are not likely to rise appreciably.

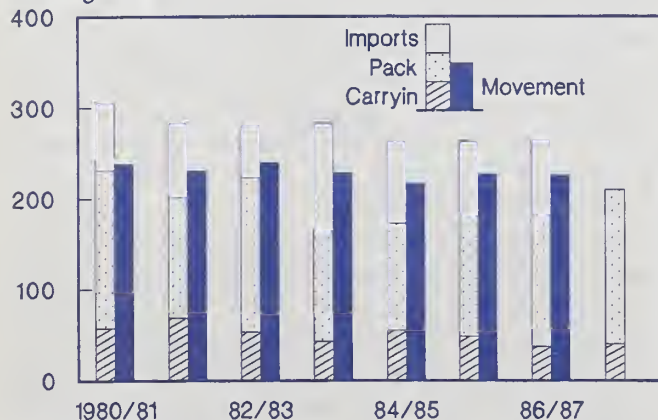
### *Increased Chilled Citrus Juice Pack Likely*

To meet continued strong demand, Florida packers processed 375 million gallons of COJ (including fresh fruit, single-strength reprocessed, and reconstituted FCOJ) during 1987/88, up 4 percent from the previous season. Despite higher prices, movement continued brisk. An even larger pack of COJ is expected for 1988/89. In addition, more COJ will be packed outside Florida from imported FCOJ. With increased domestic FCOJ supplies, prices of COJ are not likely to rise appreciably, even though demand will remain strong.

Despite reduced movement, Florida packers processed 36.9 million gallons of chilled grapefruit juice (CGJ) (exclud-

### **Florida Supply and Movement of Frozen Concentrated Orange Juice**

Million gallons



1987/88 imports estimated.

ing single-strength reprocessed), off slightly from 1986/87. The decrease was attributed to the reduced use of fruit for processing, while the utilization of FCGJ increased. Higher prices probably reduced movement, which more than offset decreased carryin stocks and pack and caused end-of-season stocks to rise 32 percent above the year before. The larger 1988/89 grapefruit crop is still likely to produce a relatively large pack even with the increased carryover. However, if movement does not improve substantially, prices may fall somewhat during the 1988/89 marketing season.

### *Demand for Canned Citrus Juice Continues Weak*

Continuing a downward trend, the three kinds of canned single-strength citrus juice (orange, grapefruit, and blend) fell from 1986/87. A total pack of 15.4 million cases (24-2's) was reported, off 12 percent from the previous year.

Because of continued weak demand, Florida's output of canned single-strength grapefruit juice totaled 7.7 million cases (24-2's), down 5 percent from 1986/87. The smaller carryin stocks and reduced output mean a smaller supply. Higher prices and shifts in consumer preference to FCGJ and CGJ have kept canned grapefruit juice sales sluggish. The f.o.b. price has been steady at \$11.25 a dozen 46-ounce cans (sweetened and unsweetened, Florida canneries), compared with \$10.15 a year earlier. The reduced supply more than offset low movement, resulting in end-of-season stocks of 1.3 million cases (24-2's), 10 percent below last season. Although the 1988/89 grapefruit crop is larger, consumer preference should cause output of canned grapefruit juice to fall again. F.o.b. prices are unlikely to strengthen appreciably unless grapefruit prices for 1988/89 stay strong.

Likewise, Florida packers processed only 7.3 million cases of canned single-strength orange juice, down 11 percent from 1986/87. Even with increased carryin, total supply is well below 1986/87. Because of higher prices and changed consumer preference, movement was down 8 percent. Prices have been steady at \$13.65 a case of 12/46 ounces (sweetened and unsweetened), compared with \$11.86 a year earlier. The higher prices were caused mostly by Brazilian citrus packers' price hikes during 1987/88. The reduced pack more than offset decreased carryin stocks and movement, leaving end-of-season stocks substantially below the preceding season. Nevertheless, Florida packers are not likely to process more canned orange juice in 1988/89, given the slow movement.

### *Exports Strong*

During 1987/88 (December-August), exports of canned single-strength grapefruit juice totaled 1.9 million gallons, up 17 percent from a year earlier, with increases recorded for the EC and the East Asia-Pacific region. Shipments to these two regions accounted for 86 percent of the total. EC pur-

chases increased 32 percent, with France—the EC leader—taking 56 percent more than the preceding season. Italy, the second leading customer, bought 203 percent more. Shipments to the East Asia and Pacific region, accounting for 48 percent of the U.S. total, rose 26 percent, but Japan, the region's leading customer, bought 3 percent less. Exports to Hong Kong rose 106 percent.

For the same period, exports of canned single-strength orange juice were 5.9 million gallons, up 72 percent from a year earlier. Purchases from the East Asia and Pacific region were almost six times as much as the year before, with nearly all the countries showing strong gains. Consequently, that region accounted for 41 percent of the U.S. total. Japan increased its purchases by 540 percent. Prospects for further increases to Japan are bright. According to the recent U.S.-Japan Agreement, single-strength orange juice not subject to blending requirements will be allowed special access as follows: 15,000 kiloliters in JFY 1988, 21,000 in 1989; and 27,000 in 1990. Imports will be allowed in unlimited quantities as of April 1, 1991. Single-strength orange juice in small containers for use in hotels may be imported in unlimited quantities this year. Purchases by the EC also showed strong gains, up 76 percent from a year ago, with almost 91 percent of total EC imports going to France. Purchases from these two regions accounted for 75 percent of the U.S. total.

## **FRESH NONCITRUS**

The 1988 noncitrus crop—including major tree fruits, grapes, and cranberries—is forecast at 13.1 million short tons, down 10 percent from 1987 but still 7 percent above 1986. Early frost, high temperatures, drought conditions, hailstorms, and tree stress from last year's bumper crop all contributed to a smaller crop for many fruits this year. Most of the decline was the result of sharp dropoffs in the apple and pear crops from last year's record production. Smaller crops were also recorded for apricots, cherries, and prunes and plums. Larger crops of peaches, nectarines, grapes, and cranberries will only partially offset the decline. Prices are likely to be higher than a year earlier (Table 6).

### **Apples**

#### *Significantly Smaller Crop*

The final forecast for the 1988 U.S. apple crop, 8.13 billion pounds, is up 1 percent from the August 1 projection but down 23 percent from last year's record. Tree stress, winter freeze, hailstorms, and drought all reduced production. However, production could reach another record in the next several years if good weather prevails. Also, more trees will reach their bearing potential in several major apple-producing States.



Table 6.--Noncitrus fruit: Total production, United States, 1986, 1987, and indicated 1988

Crop	1986	1987	1988
1,000 short tons			
Apples	3,967	5,271	4,067
Apricots	55	115	101
Cherries, sweet	138	211	169
Cherries, tart	112	179	103
Cranberries	182	166	186
Grapes	5,226	5,264	5,457
Nectarines	172	191	195
Peaches	1,164	1,214	1,264
Pears	766	940	798
Prunes and plums	491	978	796
Total	12,273	14,529	13,136

SOURCE: Crop Production, NASS, USDA.

Table 7.--Apples: Regional production, 1986, 1987, and indicated 1988

Area	1986 1/	1987 1/	1988
Billion pounds			
East	2.94	2.95	2.87
Central	1.06	1.58	1.11
West	3.93	6.01	4.15
Total U.S.	7.93	10.54	8.13

1/ Includes unharvested production and harvested not sold (million pounds): United States: 1986-25.7 and 1987-300.8.

SOURCE: Crop Production, NASS, USDA.

The Eastern States expect a crop of 2.87 billion pounds, up 2 percent from the August 1 forecast but still 3 percent below a year earlier. Bad weather reduced crop prospects in most States. Rain in August and September was generally beneficial but came too late in some areas. Fruit size varies depending on the amount and timeliness of rains. A significantly smaller crop is reported in North Carolina, and a moderately smaller crop is indicated in Virginia. New York, the leading producer in the East, expects to harvest 5 percent fewer apples. In contrast, Pennsylvania, the region's second largest producer, expects a 6-percent-larger crop, and the West Virginia crop is forecast to be 17 percent higher (Table 7).

The apple forecast in the Central States, at 1.11 billion pounds, is 1 percent below the August 1 forecast and 30 percent less than last year. Fruit size is generally smaller than normal, as rains came too late to offset the drought. A sharp dropoff in Michigan contributed to most of the decrease. Michigan, the region's leading producer, is forecast to harvest 700 million pounds, down 33 percent from last year but the same as 1986's crop. The drought kept fruit size small and made fruit set light. Ohio, the second major producer, expects to harvest 95 million pounds, off 37 percent from 1987. The crop progressed under extreme stress this summer.

Production in the Western States is forecast at 4.15 billion pounds, unchanged from August 1 but still 30 percent below 1987. Reduced production is indicated for all States in the region except New Mexico, where output remains unchanged from last year. Washington, the Nation's leading apple State, expects to harvest 3.2 billion pounds, off 33 percent from last year's record crop but still 1 percent above 1986. Tree stress probably contributed to the decline. Fruit size is variable. California, the second largest apple State, is forecast to harvest 550 million pounds, off 15 percent from 1987. Crops in Idaho and Oregon are down 13 and 31 percent, respectively.

### Higher Prices Expected

Because of the smaller crop, shipments of fresh apples are running well behind last year's pace. Through mid-October, reduced shipments were reported for most major apple-producing States. Shipments from Washington declined 22 percent from a year ago. As a result, prices are strong. Opening f.o.b. prices for fresh apples in mid-August were reported well above last year's low, but have gradually declined with increased shipments. In mid-October, the f.o.b. price for Red Delicious apples in Yakima Valley-Wenatchee, Washington, was mostly \$14 a tray pack, size 80-113, U.S. Extra Fancy, compared with \$8-\$9 a year earlier. Supplies of apples for the fresh market, particularly Red Delicious, will be well below a year ago, and prices substantially higher. However, the larger California navel orange crop may moderate fresh apple price increases somewhat (Table 8).

The trade picture for fresh apples improved significantly in 1987/88, with exports up 74 percent from the preceding season. This reflects increased supplies, lower prices, the weak dollar, and continued marketing promotion and development. The outlook for this year is not as bright as last year, because of smaller supplies and higher prices.

Table 8.--Red Delicious apples: Shipping point prices, selected regions, 1987 and 1988

Shipping points	Mid-October f.o.b. prices		Units
	1987	1988	
Western Michigan	\$6.50	\$9-\$9.50	Per carton, U.S. Fancy 2 1/4" up, 12-3 lb. film bags
Appalachian District	\$7-\$8	\$10-\$11	U.S. Comb. Extra Fancy and Fancy, tray pack, 88-113's
Yakima Valley, Washington	\$8-\$9	\$14.00	Per carton, tray pack, Wash. State Extra Fancy, 80-113's

SOURCE: National Shipping Point Trends.



Larger crops and trade regulations abroad will also cut U.S. apple exports.

Canada, the second leading U.S. apple customer in 1987/88, expects to harvest a moderately larger crop this year. Exports of fresh apples to Canada will probably be affected by Canadian import regulations that increase minimum size requirements from 2-1/4 inches in diameter to 2-3/8. Also, preliminary determinations of U.S. dumping of Delicious, Red Delicious, and Golden Delicious into Canada have been made by Revenue Canada. The rulings, made on October 6, immediately put provisional import duties into effect. The duties are based on a "normal value"—a value to cover costs and allow for profits to U.S. producers. The normal values are set at \$13.10 f.o.b. per 42-pound box (\$0.312 per pound), and function as a minimum import price. The provisional duty is determined by subtracting the f.o.b. export price from the normal value.

The United States is also facing problems exporting apples to Taiwan, the leading U.S. customer, because of Taiwanese delays in processing import licenses. However, the United States will continue to enjoy unrestricted access to Taiwan's markets. The Executive Yuan of Taiwan approved import quotas for non-U.S. apple imports on September 23.

Export prospects to the EC are not very encouraging, because their 1988 apple crop is forecast to be 20 percent larger than last year. However, the weak dollar and continued marketing promotion through the TEA fund may help boost U.S. exports somewhat.

With smaller supplies of apples in the Central and Eastern regions, processing use is expected to fall from year-earlier levels. The industry estimates that inventories of most processed apple products range from fair to excellent—mostly good to excellent. The references to "fair" were primarily in the West, where raw product supplies from the 1987 crop were exceptionally large. The "fair" indications, which mean high inventories relative to sales, were associated with juice, frozen, and dried apples. Good to excellent inventories were reported by processors in the East and Central States. Nevertheless, smaller crops have strengthened prices for processing apples. The Michigan Processing Apple Growers Marketing Committee reached minimum price agreements with virtually the entire processing apple industry in the State in late September. The negotiated minimum price for Northern Spy (2-1/2 inches and up) was set at \$11 per cwt, compared with \$8.50 a year ago. These prices will likely keep canned apple product prices relatively strong.

Retail prices of fresh apples have strengthened to levels above a year ago in August—for the first time this year. The September retail price for Red Delicious fell to 95.7 cents a pound, 31 percent above a year earlier. As the season progresses, retail prices of fresh apples will continue to fall,

but should remain above year-earlier levels in light of smaller supplies.

## Avocados

### *Slightly Larger Florida Crop*

The 1988/89 Florida avocado crop for certified shipments is forecast at 1.15 million bushels, 2 percent more than 1987/88. The increase is attributed to higher yield, as the 13,000-acre bearing area has remained steady for several years.

Reflecting the larger crop, shipments through September totaled 528,900 bushels, up 21 percent from a year ago. Despite larger shipments, f.o.b. prices at shipping points have been strong. In mid-October, the shipping point price for Florida avocados was quoted at \$6 a 1-layer carton for various varieties, greenskins (sizes 8-14), compared with \$4.50-\$5 a year ago. Strong prices for California avocados probably have boosted Florida prices. Prices are likely to rise further, because remaining supplies of the 1988/89 crop are well below last season, and California supplies will decline seasonally.

Although there are no official estimates for 1987/88 California avocado shipments by the California Avocado Commission, industry analysts expect about 6.6 million bushel-equivalents to be shipped, down 43 percent from the preceding season. Shipments through September were well below a year ago, and remaining supplies are smaller. Reduced shipments have kept prices well above a year earlier. In mid-October, the shipping point price for California avocados was \$45-\$49 a 2-layer tray pack carton (size 40) in southern California, compared with \$7.50-\$8.00 last year. The season-average price received by growers for the 1987/88 crop has been estimated at \$675 a short ton, compared with the unusual low of \$337 the previous season and the unusual high of \$1,000 in 1985/86.

### *Exports Strong*

During the first 11 months of 1987/88 (October-August), U.S. avocado exports totaled 12,661 metric tons, up 18 percent from a year earlier. The increase was due to larger shipments to the EC, totaling 6,993 metric tons, 37 percent above year-earlier levels. Almost 56 percent of the EC shipments went to France, which replaces Japan as the leading U.S. customer. Purchases by the United Kingdom were 73 percent above year-earlier levels. These two countries accounted for 80 percent of total exports to the EC.

Sharply reduced exportable supplies of Israeli avocados to the EC have contributed to strong U.S. exports. Last season, almost 78 percent of the Israeli crop was destined for the West European market. This year's crop is a disaster,

with production less than 40,000 metric tons. The reduction is due to the alternate bearing cycle of avocados and high temperatures in July following flowering. Israeli supplies for 1988/89 will again be curtailed drastically because of mid-May heat. The outlook calls for a crop of no more than 20,000-25,000 metric tons, instead of the 100,000 metric tons anticipated early in the season. Consequently, prospects for U.S. avocado exports to the EC are bright for 1988/89.

## Bananas

### *Imports Down Moderately*

During the first 8 months of 1988, U.S. imports of bananas totaled 1.9 million metric tons, down 3 percent from a year earlier. Reduced imports were reported from Ecuador, Costa Rica, and Colombia. Increased imports were recorded from Honduras. Nevertheless, Ecuador, with a decline of 1 percent, retains its position as the top U.S. supplier.

Colombia's exports declined because the Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) rejected shipments infested with scarab beetles and crickets. The shipments were arriving in Southeastern, South Central, and Northeastern U.S. ports. The PPQ refused entry to all or part of some 600,000 boxes of bananas. The scarab beetles are not found in the United States; they are plant feeders of a wide-host range. Imports from Colombia may decline further because a labor strike there on September 15 has completely shut off production. Imports from Costa Rica, the third largest U.S. supplier, fell 4 percent while Honduras, the second largest U.S. supplier, continued strong, rising 11 percent from a year ago.

Reduced imports have kept retail banana prices above a year ago through September. However, because of increased supplies of summer fruit, retail prices declined to 38.9 cents

a pound in September from the peak of 50.1 cents in June. Banana prices are likely to remain relatively high through 1988 because of reduced supplies of apples and pears.

Bananas are the most popular fresh fruit in the United States. After reaching a record 25.7 pounds per person in 1986, banana consumption fell to 24.9 pounds in 1987. Bananas accounted for 34 percent of total fresh noncitrus fruit consumption, and 24.5 percent of total fresh fruit consumption in 1987. Per capita banana consumption could fall again in 1988 because of higher prices and reduced imports.

## Grapes

### *Larger Crop Forecast*

The 1988 U.S. grape crop is forecast at 5.46 million short tons, 4 percent above last year's production and 2 percent above the 1983-87 average. The increase is due to expanded production in California (Table 9).

California's grape production is 4.95 million short tons, 6 percent above last year. The raisin-variety forecast is 2.25 million short tons, 2 percent above 1987. The raisin grape harvest got off to a very late start because of slow maturity of the crop. Hot weather in late August and early September caused much concern over the crop's size and quality. The dry-away ratio is expected to be very high, reflecting lower crop quality than in the past 2 years. Raisin varieties harvested for wine also fell. Approximately 25,000 acres of Thompson seedless grapes are enrolled in the 1988 Raisin Administrative Committee diversion program, compared with 15,000 in 1987 and 50,000 in 1986.

The California wine-variety forecast of 2.05 million short tons is 5 percent above 1987 output. The 1988 harvest got off to the slowest start in several years. Record high temperatures during late August and early September contributed to slow maturity. The California table-variety grape forecast is 650,000 short tons, 27 percent above the 1987 crop. However, the crop was reduced by heat this summer, which caused higher amounts of shattered clusters and split berries.

Reflecting reduced production in Washington, New York, Pennsylvania, and Michigan, grape production in States other than California is estimated at 506,500 short tons, down 16 percent from 1987 but still up 11 percent from 1986. Washington, the second largest grape producer, expects a crop of 185,000 short tons, off 26 percent from 1987. Berry size is smaller than expected, resulting from cool spring and early summer temperatures. The New York forecast is 158,000 short tons, 11 percent less than last year. In general, bunch counts have been reported higher than normal, while berry size and counts within bunches have been lower than normal. Pennsylvania's forecast of 56,000 short tons is 10 percent under 1987 final production. The grapes

### **Bananas: BLS Consumer Price Index**

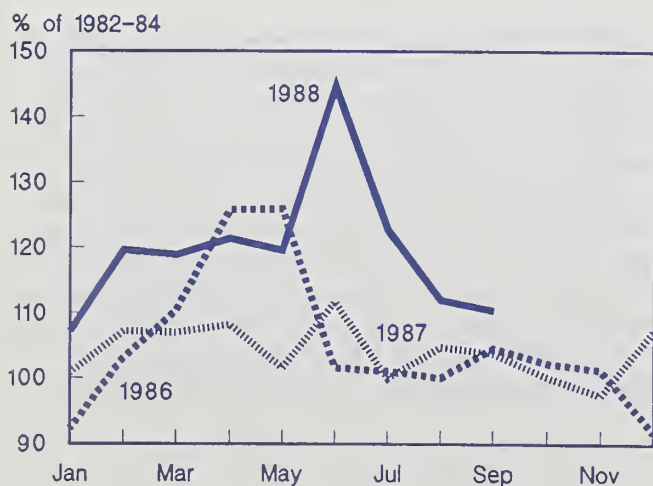




Table 9.--Grapes: Total production and season-average prices received by growers in principal States, 1986, 1987, and indicated 1988

State	Production 1/			Price per ton 2/	
	1986	1987	1988	1986	1987
	Tons			Dollars	
New York	164,000	178,000	158,000	201.00	228.00
Pennsylvania	60,000	62,500	56,000	180.00	235.00
Ohio	8,000	10,000	9,000	220.00	216.00
Michigan	32,000	60,000	55,000	247.00	260.00
Missouri	2,900	2,750	3,200	310.00	351.00
North Carolina	1,500	1,800	2,200	385.00	360.00
Georgia	2,000	2,700	2,500	792.00	870.00
South Carolina	500	700	1,100	352.00	344.00
Arkansas	6,000	5,000	7,000	212.00	269.00
Arizona	23,000	31,000	27,500	1,090.00	1,010.00
Washington	156,000	249,500	185,000	238.00	225.00
California:					
Wine	2,105,000	1,950,000	2,050,000	207.00	248.00
Table	620,000	510,000	650,000	306.00	426.00
Raisin 3/	2,045,000	2,200,000	2,250,000	209.00	229.00
All	4,770,000	4,660,000	4,950,000	221.00	259.00
United States	5,225,900	5,263,950	5,456,500	224.00	259.00

1/ Includes unharvested production and harvested not sold (tons): United States 1986-600 and 1987-13,500. 2/ Price derived from unrounded data for California all varieties and raisin varieties. 3/ Fresh basis. Excludes production from approximately 25,000 acres of Thompson Seedless vineyards in the voluntary raisin diversion program for 1988; 1987-15,000; and 1986-50,000.

SOURCES: Production, Crop Production and Prices, Noncitrus Fruits and Nuts Mid-Year Supplement, NASS, USDA.

are reported to be in good condition, but berries are very small due to the lack of rain. The Michigan forecast is 55,000 short tons, 8 percent less than last year. August rains reduced stress on vines after the summer drought, and helped the fruit to grow. Disease is minimal and quality is excellent.

### Prices Weak

The later harvest has resulted in reduced shipments of table grapes, totaling 949 million pounds through mid-October, off 3 percent from a year ago. Despite reduced supplies, prices have been weak for Thompson seedless grapes. In mid-October, the f.o.b. price was quoted at \$6-\$8 a 23-pound lug in the central San Joaquin Valley, compared with \$8-\$9 a year earlier. Fresh-market supplies will be up this season because of the larger crop. The use of table grapes for the fresh market is expected to rise because of strong domestic demand. Table grape exports are expected to continue to grow as promotional activities are expanded. During the first 3 months of 1988/89, exports of table grapes were 34,025 metric tons, up 19 percent from a year earlier.

The late harvest of raisin-variety grapes has reduced deliveries of raisins to California handlers. According to the Raisin Administrative Committee, deliveries through mid-October totaled 143,771 short tons, 34 percent below a year earlier. California growers and a few major packers have agreed on a field price of \$1,025 a short ton for Thompson

seedless raisins, up \$80 from a year ago but still well below the \$1,300 per ton of 1982 and 1983.

### Larger Crush Expected

Despite the slower maturity, use of California grapes for crushing totaled 2.48 million short tons (fresh basis), through early October, up 3 percent from a year earlier. Increases were reported for table and wine type grapes. California's crush this season is likely to exceed last year's because of the larger wine grape crop and reduced wine inventories. Even so, wine supplies in California probably will not increase appreciably because of lower stocks and reduced imports. Smaller crops in States outside California—especially the Great Lake States and Washington—are expected to result in a smaller crush of Concord and other American-type grapes.

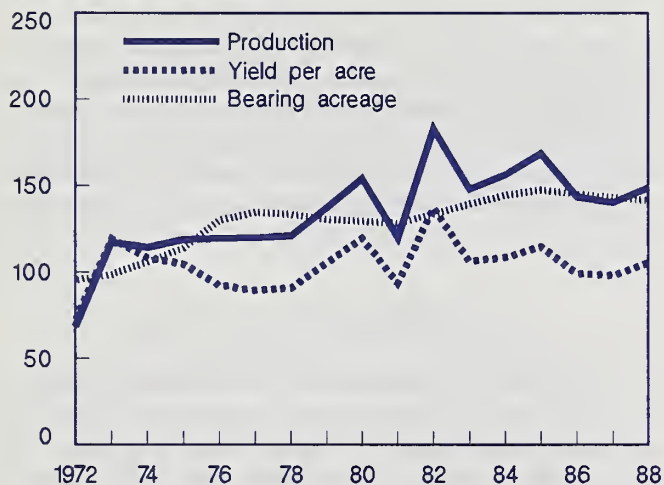
Demand for domestic wine has weakened somewhat. According to the Wine Institute, California wine shipments through this July were down slightly from a year ago. The decrease was attributed in part to sluggish wine cooler sales. Imports of table wine through August fell 10 percent, with smaller purchases from all major producing countries. The weak dollar has resulted in higher prices for imported wine, and weak sales. Imports are likely to remain sluggish. Relatively strong demand for domestic wine and higher prices for imported wine have held wine prices above a year ago. The BLS Consumer Price Index for all wine during the first 9 months of this year averaged 2 percent above a year earlier.



# California Grapes: Acreage, Yield, and Production

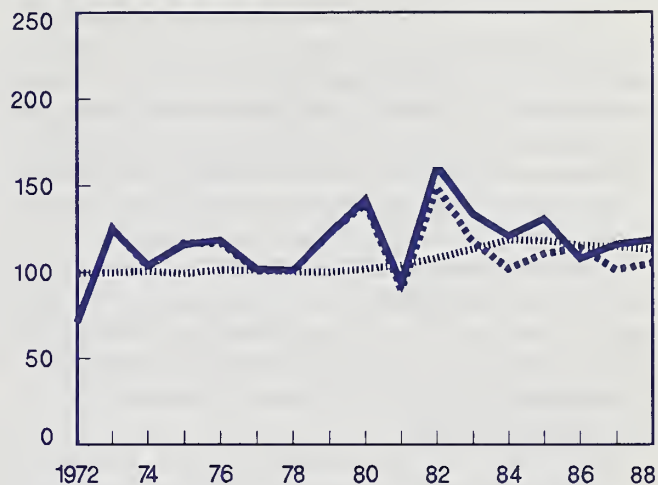
## Total Grapes

% of 1972-1974 average



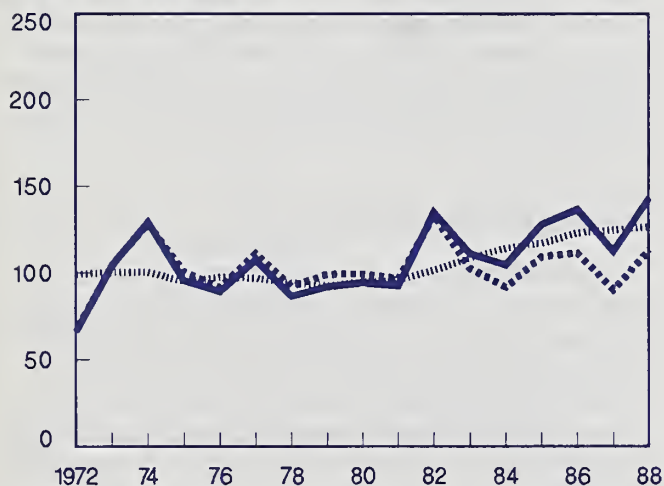
## Raisin Grapes

% of 1972-1974 average



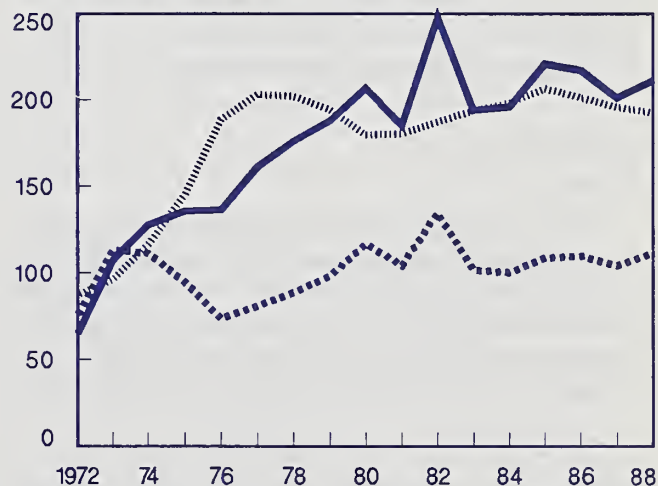
## Table Grapes

% of 1972-1974 average



## Wine Grapes

% of 1972-1974 average



1987 preliminary. 1988 indicated

## Pears

### Sharply Smaller Crop

The final forecast for the 1988 U.S. pear crop is 798,100 short tons, down 15 percent from last year's record but 4 percent more than 1986. The bartlett crop in California, Oregon, and Washington is forecast at 485,000 short tons, down 16 percent from last year, but 4 percent more than 1986. The July heat wave in California caused fruit size and quality to vary among orchards. Quality was reduced in the Northern Coast area by hail and early-season frost damage. In Oregon, fruit quality was generally good, but less than expected in the Hood River district. Fruit was smaller than normal in Washington, but size was better than expected. Area for California bartletts continued to fall, declining almost 5 percent from 1987 to 20,700 acres. Acreage was up in Oregon and Washington.

Output of Pacific Coast pears other than bartletts is forecast at 276,000 short tons, 16 percent less than 1987 but almost 6 percent above 1986. Reduced production is reported from all three States, but acreage has increased. Quality was good but sizes varied. These pears are mostly marketed fresh during the winter and spring.

### Strong Winter Pear Prices Expected

Because of the smaller crop, shipments of bartlett pears are running well behind last year's pace. Consequently, f.o.b. prices for Washington bartletts have been substantially above year-earlier levels. In mid-October, the f.o.b. price was quoted at \$16 a 30-pound carton for size 100 in Washington, compared with \$11-\$12 a year ago (Table 10).

Because of the smaller crop and strong processing demand, Northwest processors and the Washington-Oregon Canning Pear Association set bartlett field prices at \$200 a ton for No. 1 grade, 2-1/4 inches, and \$150 per ton for No. 2 grade, 2-1/8 to 2-1/4 inches. This compares with \$170 for No. 1's and \$127.50 for No. 2's in 1987, and with \$177 and \$133 per ton in 1986. California pear growers have also set-

tled with processors for a field price of \$200 a short ton for canning bartletts, up \$20 from 1987. This is the second highest price established in the last 35 years.

Reflecting the smaller crop, opening f.o.b. prices for winter pears at shipping points in early October were also well above a year ago. The f.o.b. price for D'Anjous in Yakima Valley, Washington was quoted at \$15-\$16 a carton (size 100) in mid-October, compared with \$11-\$12 a year earlier. The smaller crop and reduced supplies of apples will keep f.o.b. prices for winter pears above year-earlier levels.

## PROCESSED NONCITRUS

The outlook for processed noncitrus fruit during 1988/89 is mixed. With low carryin stocks, supplies and pack for several canned fruit during 1988/89 will be tight again. F.o.b. prices for some canned fruit have advanced because of relatively strong movement, higher raw fruit prices, and tight supplies. Supplies of raisins are likely to be adequate, since carryin inventories are higher than last season. The smaller prune crop will push supplies below last year, even with bigger carryin stocks. Prices of dried fruit will likely remain firm because of strong demand. Supplies of frozen fruit and berries will be adequate, and prices are not likely to rise appreciably.

### Smaller Canned Fruit Pack Likely

Decreased crops of apples, bartlett pears, apricots, cherries, and prunes and plums are expected to result in less canning than last year. However, the larger clingstone peach crop resulted in greater pack of canned peaches and fruit cocktail. A total of 14.8 million cases (No. 24/2-1/2's) of canned clingstone peaches was packed, up 17 percent from last year, while a 4-percent increase in canned fruit cocktail is reported.

On the other hand, a trade source indicates that the pack of canned mixed fruit totaled 2.4 million cases (No. 24/2-1/2's), down 7 percent from last year. Supplies will be tight again during 1988/89 because of depleted carryin stocks. As a result, prices should stay high. Packers have already announced price hikes for several canned fruit. The September Producer Price Index advanced to a record 114.8 (1982-84=100), up fractionally from August and up 1 percent from a year earlier.

The smaller apple crop will reduce the canned apple product pack. Although data for canned apple product stocks are not available, the industry says that inventories are relatively large. The actual reported inventories vary considerably by products and regions—more so than in previous years. Sauce inventories, compared to last year and to normal, are reported to be up slightly in the East, unchanged in

Table 10.--Pears: Shipping point prices, selected regions 1987 and 1988

Shipping points	Mid-October f.o.b. prices		Units
	1987	1988	
Mendocino County, California: Bartlett	\$7-\$7.70	---	U.S. No. 1, 30 lb. std. box wrapped pack, 100's
Yakima Valley, Washington: Bartlett	\$11-\$12	\$15-\$16	U.S. No. 1, std. box wrapped pack, 90-135's

SOURCE: National Shipping Point Trends.



the Central States, and up sharply in the West. Canned slice inventories are down slightly. Juice is down slightly in the East, unchanged in the Central regions, and up again in the West.

The industry also foresees a substantial reduction in raw apple usage for processing from this year's crop, compared to 1987. The major change will be for juice, which is expected to be down from last year. Even with reduced pack, the relatively larger carryin stocks will keep supplies adequate to meet market demand. However, the higher prices for processing apples are likely to raise canned apple product prices.

Because of the smaller cherry crop, the U.S. pack of canned red tart cherries is 434,000 cases (No. 24/2 to 2-1/2's), 8 percent below 1987. Consequently, even with 5-percent-larger carryin stocks, the 1988/89 supply will be 7 percent lower. The canned sweet cherry pack is also reported to be slightly below last year, but with sharply larger carryin stocks, the supply should be adequate. According to the Northwest Food Processors Association, Northwest canners packed 249,262 cases (No. 24/2-1/2) of dark sweet cherries, down 11 percent from last year, while a 26-percent-larger pack of canned light sweet cherries is reported. This season's supplies of canned dark sweet cherries and light sweet cherries will be up 3 and 13 percent, respectively, in the Northwest. Despite larger supplies, f.o.b. prices for canned cherries will likely be above last season because of higher raw fruit prices.

### *Supplies of Dried Fruit Adequate*

Output of raisins is about the same as last season. At present, trade estimates place total raisin output at 360,000 short tons, compared with 1987's 358,000 short tons. Thus, with larger carryin stocks, the 1988/89 supply will still be

relatively large. However, strong demand and higher field prices are likely to keep raisin prices firm. The BLS July Producer Price Index for raisins (the latest available), stood at 88.2 (1982-84=100), 5 percent above a year earlier.

Raisin shipments got off to a fast start. According to the Raisin Administrative Committee, shipments during the first 2 months of 1988/89 rose 2 percent from a year ago, as increased domestic shipments (including those to Canada) reached 67 percent of the total and more than offset exports, which declined 18.5 percent. Japan, the leading customer, decreased its purchases by 9 percent. Shipments to Western Europe have been down substantially. Exports to the major countries—the United Kingdom, West Germany, and Sweden—showed large decreases.

Exports to the EC probably will not be as favorable as last season because of increased EC processing subsidies for Greek raisins. Also, larger raisin output from Greece and Turkey is expected to reduce export potential to the EC. However, the weak dollar and the continued TEA promotional program may moderate the decline somewhat.

Production of dried prunes, the other major dried fruit, is estimated at 155,200 short tons (natural condition), off 27 percent from 1987. With increased carryin stocks, the total dried prune supply for 1988/89 is expected to be only slightly below last year's 232,895 short tons.

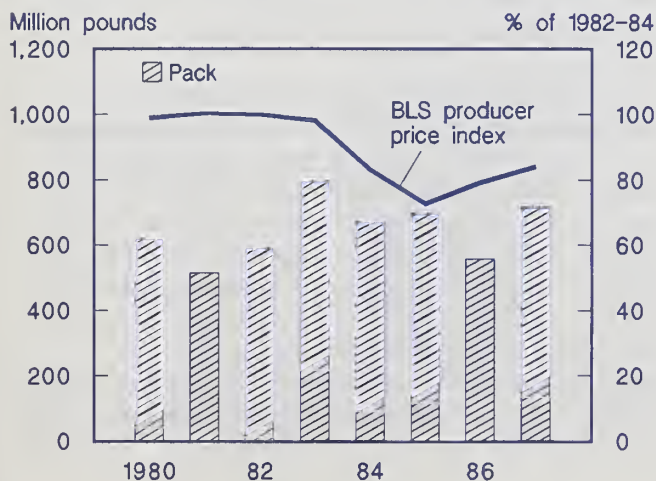
Shipments of dried prunes during the first 2 months (August-September) of the 1988 season totaled 30,268 short tons, up sharply from a year earlier. Increased shipments were recorded for both domestic and export markets. The share for domestic shipments, including Canada, has risen to 62 percent from 54 percent a year ago. Exports increased only slightly. Japan, the leading customer, has purchased a moderately larger quantity. Shipments to Western Europe have increased only fractionally this season. Increased sales were reported to Italy, West Germany, and Denmark. Decreased sales to Finland, Spain, and the United Kingdom were only partially offsetting. Nevertheless, this season's total exports to Western Europe probably will fall, because the French prune crop is estimated to be much larger than last year.

So far this season, prune sizes have been running toward the 50/60 and 60/70 range. Supplies of large prunes (30/40's and 40/50's) are somewhat limited. This may affect export markets and is likely to keep prices strong. The August BLS Producer Price Index stood at 109.6 (1982-84=100), up 4 percent from a year ago.

### *Smaller Pack of Frozen Fruit and Berries Expected*

The 1988 pack of frozen fruit and berries is expected to be below 1987. Large stocks of frozen strawberries at the beginning of the season have slowed deliveries to freezers in

## **U.S. Raisin Pack and Producer Price Index**



California. A total of 175 million pounds was delivered to California freezers through October 1, down 21 percent from a year ago. Reduced demand has also caused slow deliveries of processing strawberries. Imports of frozen strawberries, mostly from Mexico, have been well below year-earlier levels during 1987/88 (December-August). Deliveries to freezers in Oregon and Washington were also down substantially. Even with a smaller pack, supplies of frozen strawberries should be adequate during 1988/89 because of larger carryin stocks. Prices are not expected to rise appreciably, because raw berry prices are generally lower than last season.

Freezers' receipts of Oregon blackberries totaled 28 million pounds through October 1, down 19 percent from a year ago, while those from Washington, although small, fell 54 percent. Likewise, deliveries of red raspberries to freezers in Oregon and Washington were also much less than last season.

With a much smaller crop, 100.6 million pounds of tart cherries have been used for freezing through August 1, compared with 124.7 million a year ago. However, larger carryin stocks will ensure adequate supplies of frozen cherries. The smaller apple crop is also expected to result in decreased deliveries to freezers.

### *Cold Storage Stocks Up Substantially*

As of October 1, cold storage holdings of frozen fruit and berries totaled 983 million pounds, up 10 percent from a year ago. Relatively large stocks were indicated for most fruit and berries, with peaches recording the largest increase, up 64 percent from last year. Demand and prices for frozen fruit and berries will likely stay stable, given the healthy economy (Table 11).

Table 11.--Stocks of frozen fruit:  
end of September, 1985-88

Frozen fruit	1985	1986	1987	1988
1,000 pounds				
Apples	32,016	44,430	40,956	35,540
Apricots	9,294	6,963	10,785	10,475
Blackberries	17,770	20,427	29,582	29,580
Blueberries	77,714	68,264	71,665	94,301
Boysenberries	3,358	3,932	5,553	5,287
Cherries 1/	205,667	199,419	208,050	202,747
Grapes	5,012	2,181	4,049	1,530
Peaches	56,537	60,567	69,450	114,145
Raspberries, red	33,998	37,536	46,748	54,757
Strawberries	231,962	198,831	301,469	310,582
Other frozen fruits	83,785	98,189	109,368	124,056
Total frozen fruits	757,113	740,739	897,675	983,000

1/ Includes both sweet and tart cherries.

SOURCE: Cold Storage, NASS, USDA.

## BERRIES

### Cranberries

#### *Record Crop Forecast*

The 1988 U.S. cranberry crop is forecast at a record 3.73 million barrels, up 12 percent from 1987 and 2 percent from 1986. Increased production is recorded for all States except Washington. Massachusetts, the leading State, expects to harvest a record 1.83 million barrels, 26 percent more than 1987 and 1 percent more than 1986. Prospects are excellent and indicate a record crop. Bogs came through the winter in good condition with no winter kill, and suffered little injury from spring frosts. A heavy bloom, accompanied by excellent pollination weather, resulted in an average to heavy set. The dry weather of June and early July broke with heavy rain in late July. July rainfall was more than double normal, and adequate water supplies are available for harvest.

Production in Wisconsin, the second leading State, is forecast at 1.34 million barrels, up 1 percent from 1987 and 4 percent more than 1986. The crop has a good fruit set and berry size, but water availability is the major concern. Winter damage, hail damage, and heat stress have been minor.

In New Jersey, a crop of 150,000 barrels is expected, 11 percent above 1987 but 5 percent below 1986. Prospects are generally good. Bloom and set were average to heavy. The drought has reduced berry size. The heat has slowed maturity and, in some areas, damaged vines.

In Oregon, the crop is forecast at 150,000 barrels, 6 percent more than last year and 23 percent above 1986. Hail in late April caused some plant damage. This was followed by rain during the bloom which caused poor pollination in some bogs, but fruit size was still better than last year. Above-normal June and July temperatures produced good berry size. In contrast, the Washington crop is expected to be 108,000 barrels, 17 percent less than last year but 8 percent more than 1986. Frost and insect damage combined with cool, rainy pollination weather to reduce crop prospects.

Because of the larger crop, cranberry shipments have been running well ahead of last year's pace. Season-opening prices in early October for fresh Massachusetts cranberries in the Boston Wholesale Market were moderately above a year ago, and are falling as the season progresses. In mid-October, the wholesale price was quoted at \$17.50 a carton (24-12 ounce film bags) for Early Blacks, compared with \$17.00 a year earlier. Demand for cranberry products has been strong, so more cranberries are expected to be processed this season than last season. Thus, prices for fresh cranberries may not fall appreciably, even with a record crop.



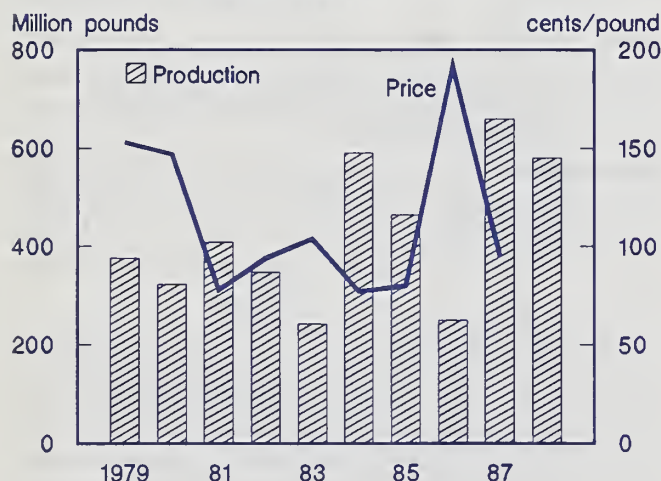
## TREE NUTS

### Almonds

In July, the 1988 California almond crop was forecast at 580 million pounds (shelled basis), 12 percent below last year's record 660 million pounds (see table 12). Some trade sources indicate the crop is lower than forecast, and major suppliers have recently withdrawn from the market, waiting for harvest to be near completion and supplies to be more definite. Quality has been lower than expected due to insect damage and problems related to the extremely hot summer.

Handler receipts, July 1 through September 30, as reported by the Almond Board of California, were nearly 324 million pounds, slightly higher than a year ago. For the same period, inedible kernels and rejects were running about 4 percent, compared with 1.9 percent last year. About 82 percent of deliveries to date have been the Nonpareil variety,

#### Almonds: Production and Season-Average Grower Prices



versus 85 percent a year ago. Total shipments, July 1-September 30, were 168 million pounds, compared with 113 million through the same date a year earlier. Of the total, 42 million moved to domestic markets (up 37 percent from a year ago) and over 125 million pounds moved to export markets (up 54 percent).

Export demand is expected to continue strong and may break previous records, as almonds are favorably priced at current exchange rates. Domestic demand is also expected to continue strong, and per capita consumption of almonds in the United States may reach a new record. Grower prices are expected to average above \$1.00 per pound this season, compared with 95 cents for the 1987/88 marketing year.

California shellers in late September were posting prices for Nonpareil Supreme 20/22 and 22/24 count at \$1.54 per pound, 23/25 count at \$1.52, and 25/27 to 27/30 at \$1.50; Nonpareil select sheller run 20/22 to 22/24 at \$1.51, 23/25 at \$1.49, and 25/27 to 27/30 at \$1.47 per pound, f.o.b. West Coast.

### Filberts

#### Fourth Largest Crop is Forecast

Oregon and Washington filbert (hazelnut) growers are expecting to harvest 18,000 short tons this year, compared with 21,800 in 1987. Filbert production and grower prices appear to be rebounding in the 1980's (see table 12). Harvest began in early October, but rains are needed to ensure quicker nut drop. Nut size and weight are above 1987 averages. Opening prices showed shelled extra large at \$1.83 per pound, f.o.b. West Coast, while in-shell large size opened at 73 cents per pound. Major sellers have withdrawn from the market, and reportedly the crop is virtually sold out.

#### California Almond Exports by Destination

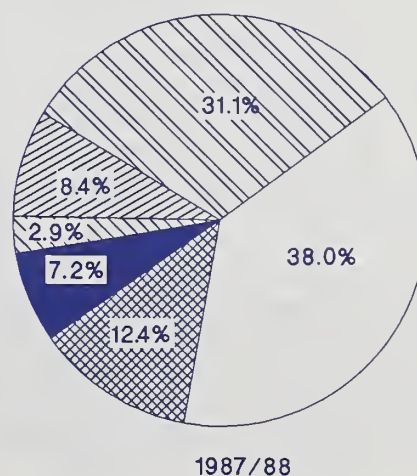
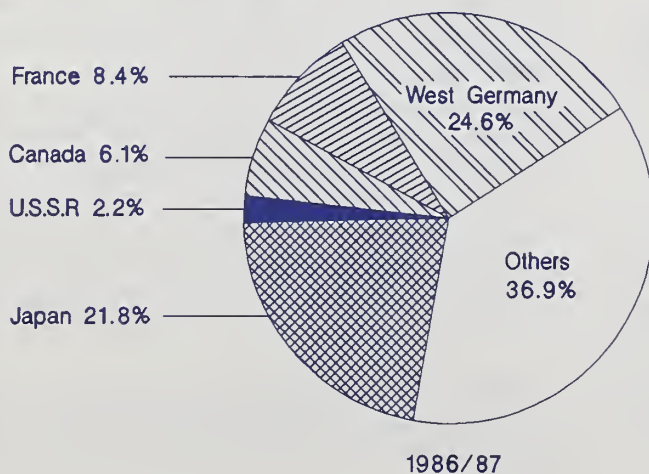


Table 12.--Tree nuts: Production in principal States, 1986, 1987, and indicated 1988

Crop and States	1986	1987	Indicated 1988	Crop and States	1986	1987	Indicated 1988
	1,000 pounds shelled basis				Short tons in-shell basis		
Almonds:				Pecans:			
California	250,000	660,000	580,000	North Carolina	2,000	1,000	1,750
		Short tons in-shell basis		South Carolina	3,250	1,700	2,500
Filberts:				Georgia	60,000	57,500	57,500
Oregon	14,900	21,500	17,700	Florida	2,750	2,750	2,500
Washington	200	300	300	Alabama	8,000	12,500	5,500
2 States	15,100	21,800	18,000	Mississippi	3,750	6,000	6,500
Macadamia nuts:				Arkansas	600	650	1,500
Hawaii	22,000	21,350	NA	Louisiana	15,000	9,500	15,000
Pistachios:				Oklahoma	7,500	6,000	13,500
California	37,450	16,550	47,500	Texas	20,000	21,000	22,500
Walnuts, English:				New Mexico	13,500	12,500	13,000
California	180,000	247,000	200,000	Total	136,350	131,100	141,750
				Improved varieties 1/	91,325	89,825	93,780
				Native and seedling	45,025	41,275	47,970
				Total 5 tree nuts 2/	390,900	437,800	3/ 407,250

1/ Budded, grafted, or topworked varieties. 2/ Excludes almonds. 3/ Excludes macadamia nuts.  
N.A. = Not available.

SOURCE: Crop Production, NASS, USDA.

World production of filberts is forecast at 541,330 metric tons, 29 percent more than last year. Although the U.S. crop is lower this year, a bumper crop of 360,000 metric tons is expected in Turkey, up 29 percent from 1987. A heavy crop is also forecast in Italy, where production is expected to reach 140,000 tons, 56 percent higher than 1987. Filbert imports into the United States, January 1 through August 1 this year, totaled 2.82 million pounds, or 12 percent below the same period in 1987. Most imported filberts are from Turkey, the world's largest supplier.

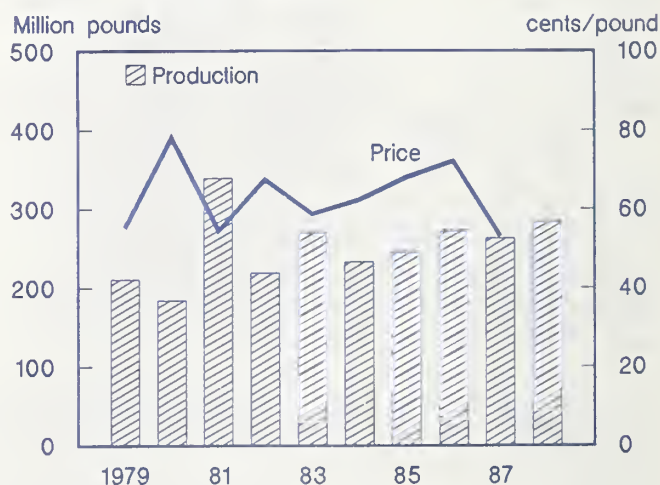
## Pecans

### Above-Average Crop Expected

The October 1 forecast for the pecan crop in the 11 estimating States has increased to 284 million pounds, (in-shell basis), 8 percent higher than 1987 production and 4 percent above 1986. Georgia, the largest producing State, expects 115 million pounds to be harvested, the same as last year (see table 12). This summer's drought has caused some production losses, but the dry conditions have also reduced the incidence of pecan scab.

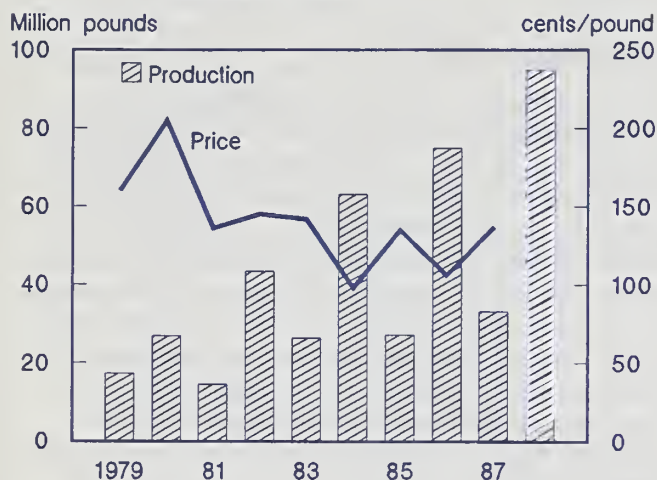
Trade sources indicate total pecan supply similar to a year ago (see table 13). Harvest was underway during September in the Southwest, and getting underway in the Southeast in October. New crop pricing is expected soon and should be well established before the Thanksgiving holiday. Old-crop prices have been quoted at \$1.90-2.00 per pound and fancy halves at \$2.35-2.40 per pound, f.o.b. Southeast.

### Pecans: Production and Season-Average Grower Prices





## Pistachios: Production and Season-Average Grower Prices



### Pistachios

#### Record Crop Expected

In September, the USDA forecast for California's 1988 pistachio production was 95 million pounds (in-shell basis). However, based on harvest data the California Pistachio Commission has recently revised the original estimate to 85 million pounds. This is the largest crop ever and significantly above last year's small crop of only 33 million pounds. Pistachio production is cyclical due to the alternate bearing characteristics of pistachio trees (see table 12).

Although the crop this year is a record, quality is low with substantial staining reported. Major suppliers withdrew from the market following opening prices in mid-September. Recently some suppliers have quoted prices 15 cents per pound over opening levels, which brings roasted and salted extra large to \$2.50, large to \$2.40, and medium \$2.15 per pound, f.o.b. West Coast. Harvest normally lasts about 45 days and should be completed in late October.

Trade sources project that total supply of snack type pistachios may total about 78 million pounds. Total sales last season were 50 million pounds, and projected sales for the 1988/89 season should be higher. In-shell imports of pistachios totaled 1.9 million pounds from January 1 through August 1, up 51 percent from the same period in 1987. Most U.S. imports of pistachios are from Turkey, but are very small compared with past years when pistachios were imported from Iran. California production is expanding rapidly to meet domestic demand and the ban on imports from the world's largest supplier, Iran.

Total world production of pistachios for the 1988/89 season, excluding Iran and Afghanistan, has been forecast at 80,400 metric tons, compared with 62,500 tons in 1987/88.

The 1988/89 season is an off year in Italy and Turkey. Production in Turkey is expected to be 15,000 metric tons, 40 percent below last year. The forecast for Italy is a mere 300 metric tons, sharply below the 4,300 tons produced in 1987. Production in Greece and Syria continues to increase. Greece, at 4,000 metric tons, is up 25 percent, while Syria, at 18,000 tons, is 20 percent higher than last season.

## Walnuts

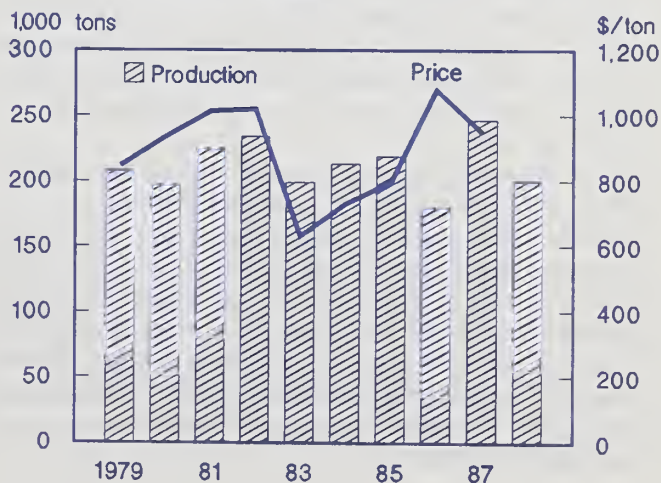
### Smaller Crop But Ample Supply

In September, California's 1988 walnut production was forecast at 200,000 short tons, in-shell basis, 19 percent lower than last year's record, but 11 percent above 1986 (see table 12). The crop has been adversely affected by the hot, dry summer, which resulted in shriveling of kernels and drying problems. Additionally, the number of nuts set per tree this year was 13 percent below the 1987 crop. Harvest of early varieties started in early September.

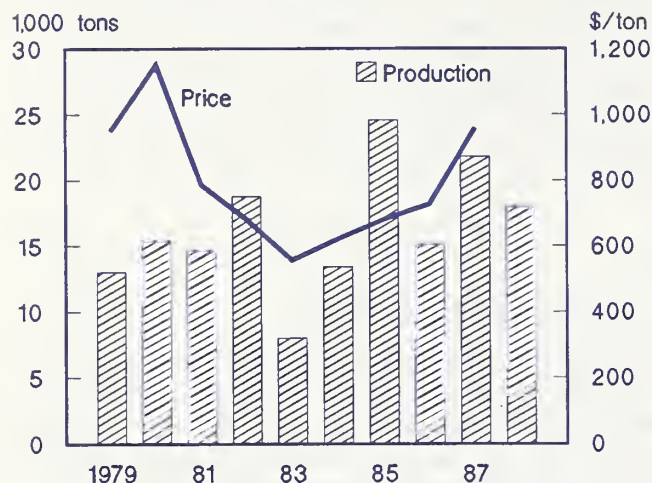
Both domestic and export shipments of in-shell and shelled walnuts were strong during the 1987/88 marketing season. Total in-shell shipments in 1987/88 were nearly 143 million pounds, compared with 132 million in 1986/87. Shelled walnut shipments totaled over 126 million pounds in the 1987/88 season compared with 106 million in 1986/87. Total stocks on hand at the beginning of the 1988/89 marketing season beginning August 1, converted to kernel weight basis, were 60.3 million pounds, compared with 28.4 million in 1987 and 52.5 million in 1986. With a large carryover and normal production, supplies should be ample to meet domestic and export needs. Prices are expected to remain firm.

Imports from January 1 to August 1 totaled 281,000 pounds, down 89 percent from the same period a year ear-

## Walnuts: Production and Season-Average Grower Prices



## Filberts: Production and Season-Average Grower Prices



lier. Commercial world production of walnuts is expected to total 450,400 metric tons in 1988/89, compared with 500,600 in the 1987/88 season. Although the United States is still the world's largest producer of walnuts, China is on an upward trend. The estimate for China is 155,000 metric tons, up 5 percent from last year. The crop in Turkey is estimated at 64,000 metric tons, nearly the same as in 1987. Production in France, India, and Italy is on a downward

trend, due to marginally productive orchards and tree removals.

## Other Tree Nut Supplies Lower

Imports of cashews for the first 7 months of this year were 42 million pounds, 18 percent lower than a year earlier. Asking prices for cashews in September have firmed up, with raw 240's up to \$3.15-3.23, and 320's to \$3.00-\$3.15 per pound, ex-warehouse New York. Production of cashews in India is reported to be much lower this year. Imports of Brazil nuts totaled 3.36 million pounds from January 1 to August 1, 1988, down 36 percent from the same period in 1987. Asking prices for Brazil nuts have also firmed up. Prices quoted in September were 15 cents higher than the previous month, with midget and medium size at \$1.45-\$1.50 per pound, ex-warehouse, New York. However, trade sources expect world supplies of Brazil nuts to be much higher this year.

Macadamia nut production in Hawaii this season is expected to rebound from the 42.7 million pounds (in-shell basis) harvested in 1987. The 1988 yield should average better than 1987's 2,700 pounds per acre, and acreage harvested continues to increase. Major sellers report this crop is completely sold out.

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Table 13.--Tree nuts: Supply and utilization (shelled basis) 1985, 1986, and 1988

Crop and season 1/	Production	Imports	Beginn- ing stocks	Total supply	Ending stocks	Total use	Exports	----Consumption---- Total	Per capita
	1,000 pounds							Pounds	
Almonds:									
1985 2/	444,000	460	227,010	627,070	144,280	482,790	332,190	150,600	.63
1986 2/	235,690	692	144,330	380,712	76,191	304,521	174,010	130,511	.54
1987 2/ 3/	634,560	1,494	79,017	600,851	116,071	484,780	343,300	141,480	.58
Pecans:									
1985	110,868	14,298	50,370	175,536	59,952	115,584	2,264	113,320	.47
1986	125,544	10,918	59,952	196,414	63,423	132,991	2,755	130,236	.54
1987 3/	121,194	12,966	63,423	197,583	62,520	135,063	4,021	131,042	.53
Walnuts:									
1985	149,880	128	42,556	192,564	51,999	140,565	38,421	102,144	.42
1986	128,960	2,655	51,999	183,614	28,316	155,298	45,959	109,339	.45
1987 3/	209,460	470	28,316	238,246	60,049	178,197	60,156	118,041	.48
Filberts:									
1985	19,434	4,195	552	24,181	1,273	22,908	6,666	16,242	.07
1986	11,627	3,721	1,273	16,621	404	16,217	6,965	9,252	.04
1987 3/	18,007	3,863	404	22,274	947	21,327	6,810	14,517	.06
Pistachios:									
1985	22,477	14,875	11,282	48,634	7,329	41,305	1,654	39,651	.16
1986	43,389	5,357	7,329	56,075	14,928	41,147	2,172	38,975	.16
1987 3/	16,831	2,166	14,928	33,925	5,474	28,451	3,457	24,994	.10

1/ Season beginning July 1 for almonds and pecans, August 1 for filberts and walnuts, and September 1 for pistachios. 2/ Differences in beginning and ending stocks are adjustment made by the Almond Board of California. 3/ Preliminary.

Note: Total supply excludes quantities for market reserves in million pounds: 1985-44.4 and 1987-114.2.

SOURCE: Commodity Economic Division, ERS, USDA.

Table 14.--Seven citrus fruits: Production, use, and value,  
United States, 1985/86-1987/88 1/

Fruit and season	Production 2/	Use of production				Value of production
		Fresh		Processed		
		Quantity	Percentage	Quantity	Percentage	
	1,000 short tons		Percent	1,000 short tons	Percent	1,000 dollars
Oranges:						
1985/86	7,487	2,120	28.3	5,367	71.7	1,092,225
1986/87	7,697	2,070	26.9	5,627	73.1	1,322,623
1987/88	8,457	2,126	25.1	6,331	74.9	1,701,479
Grapefruit:						
1985/86	2,339	1,079	46.1	1,260	53.9	340,012
1986/87	2,568	1,188	46.3	1,380	53.7	412,234
1987/88	2,781	1,329	47.8	1,452	52.2	471,558
Lemons:						
1985/86	697	436	62.6	261	37.4	219,270
1986/87	1,087	469	43.1	618	56.9	182,076
1987/88	785	459	58.5	326	41.5	202,854
Limes:						
1985/86	76	39	51.3	37	48.7	21,901
1986/87	63	37	58.7	26	41.3	19,569
1987/88	57	38	66.7	19	33.3	23,314
Tangelos:						
1985/86	133	60	45.1	73	54.9	19,141
1986/87	180	59	32.8	121	67.2	24,626
1987/88	189	63	33.3	126	66.7	32,687
Tangerines:						
1985/86	186	124	66.7	62	33.3	58,979
1986/87	220	151	68.6	69	31.4	67,290
1987/88	212	148	69.8	64	30.2	78,197
Temple:						
1985/86	133	41	30.8	92	69.2	16,052
1986/87	153	47	30.7	106	69.3	20,513
1987/88	160	58	36.3	102	63.7	26,631
Total:						
1985/86	11,051	3,899	35.3	7,152	64.7	1,767,580
1986/87	11,968	4,021	33.6	7,947	66.4	2,048,931
1987/88	12,641	4,221	33.4	8,420	66.6	2,536,721

1/ Preliminary. 2/ Production having value.

SOURCE: Citrus Fruits, NASS, USDA.



Table 15.--Selected citrus fruit: Used for processing by percentages of total production, 1980/81-1987/88

State, variety, and season	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88 1/
Percent								
Oranges:								
Florida								
Temple	69.3	73.8	66.7	73.7	80.7	69.1	69.0	63.6
Early and midseason	94.5	93.3	91.4	92.9	92.0	92.0	92.0	92.5
Valencia	96.3	94.8	93.9	94.3	95.4	93.0	93.3	93.9
Total	95.2	93.9	92.6	93.5	93.6	92.5	92.6	93.1
California								
Navel and miscellaneous	37.0	20.0	32.3	24.8	11.8	19.7	23.2	21.0
Valencia	50.2	20.8	55.3	17.6	34.0	18.2	35.0	30.0
Total	42.3	20.3	43.2	22.6	22.9	19.1	28.0	25.0
Grapefruit:								
Florida								
Seedless	60.2	60.3	47.1	54.2	63.5	55.0	55.4	54.8
Colored	39.0	43.3	27.6	32.7	40.9	28.4	30.7	31.1
White	71.1	69.5	58.5	66.8	78.4	73.7	73.7	72.5
Other seeded	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	65.9	65.2	53.5	59.3	65.9	58.0	58.0	57.1
Texas	30.6	48.0	30.4	10.6	0	9.1	19.2	26.7
Tangerines:								
Florida	36.5	36.4	33.8	29.8	48.6	39.0	37.5	34.1
California	59.1	35.3	47.0	50.3	31.8	29.4	26.8	27.1
Lemons:								
California	62.3	56.9	54.4	46.4	52.8	37.1	53.5	40.6
Arizona	68.0	59.0	52.9	42.0	60.2	39.1	67.0	46.2

1/ Preliminary. 2/ Per program modification, Florida "all tangerines" includes honey tangerines beginning with 1987/88 crop year. Estimates starting with the 1984/85 season have been revised to include honey tangerines.

SOURCE: Citrus Fruits, NASS, USDA.

Table 16.--Oranges and grapefruit processed, Florida, 1985/86-1987/88

Crop and season	Frozen concentrates	Chilled juice	Other processed 1/	Total processed
1,000 boxes				
Oranges 2/:				
1985/86	96,061	17,267	1,361	114,689
1986/87	96,182	19,661	948	116,791
1987/88	110,206	23,325	904	134,435
Grapefruit:				
1985/86	21,572	1,189	4,369	27,130
1986/87	24,143	2,295	2,424	28,862
1987/88	26,690	1,965	2,085	30,740

1/ Includes cannery juice, blends, sections, and salads.  
2/ Includes tangelos, Temples, tangerines, and K-early citrus.

SOURCE: Citrus Fruits, NASS, USDA.

Table 17.--Oranges used for frozen concentrate, Florida, 1985/86-1988/89

Season	Florida orange and Temple production	Used for frozen concentrates 1/	Yield per box 2/
Million boxes		Percent	Gallons
1985/86	122.2	96.1	78.6
1986/87	123.1	96.2	78.1
1987/88	141.6	110.2	77.8
1988/89	155.8	NA	NA

1/ Includes tangelos, Temples, tangerines, and K-early citrus. 2/ Gallons per box at 42.0 degrees Brix equivalent. NA = not available.

SOURCES: Crop Production and Citrus Fruits, NASS, USDA, and Florida Citrus Processors Association.

Table 18.--Citrus fruit: Season-average equivalent returns per box received by growers, by variety and use, by State and total United States, 1986/87-1987/88

Variety, States, and U.S.	1986/87						1987/88					
	Equivalent P.H.D. 1/			Equivalent on-tree			Equivalent P.H.D. 1/			Equivalent on-tree		
	All	Fresh	Proc.	All	Fresh	Proc.	All	Fresh	Proc.	All	Fresh	Proc.
Dollars												
ORANGES:												
Florida												
Early and midseason	6.56	8.10	6.43	4.56	6.10	4.43	7.85	9.40	7.73	5.85	7.40	5.73
Valencia	8.02	8.30	8.00	6.02	6.30	6.00	9.88	10.20	9.86	7.88	8.20	7.86
All	7.22	8.18	7.14	5.22	6.18	5.14	8.73	9.71	8.66	6.73	7.71	6.66
Temple	6.03	7.40	5.42	3.60	5.00	2.97	7.50	9.20	6.53	5.07	6.80	4.08
California												
Navel and misc.	7.04	9.20	-1.12	5.40	7.56	-1.76	7.82	9.58	1.20	6.11	7.84	-4.44
Valencia	8.17	11.84	1.38	6.47	10.14	-3.32	8.92	11.78	2.26	7.16	10.02	.50
All	7.50	10.16	.64	5.83	8.50	-1.03	8.31	10.49	1.76	6.57	8.74	-.06
U.S. 2/	7.29	9.70	6.41	5.40	7.98	4.45	8.62	10.30	8.06	6.70	8.51	6.09
GRAPEFRUIT:												
Florida												
Seedless	6.65	7.49	5.98	5.03	5.89	4.33	7.14	8.45	6.06	5.51	6.85	4.41
Seeded	5.87	--	5.87	4.27	--	4.27	6.49	--	6.49	4.89	--	4.89
All	6.61	7.49	5.97	4.98	5.89	4.32	7.11	8.45	6.10	5.48	6.85	4.45
Texas	8.19	9.04	4.60	7.02	7.88	3.40	7.03	7.94	4.52	5.97	6.93	3.32
California	6.06	9.15	.81	4.62	7.71	-.64	6.25	8.49	1.08	4.77	7.01	-.41
Arizona	5.06	7.48	.90	3.53	5.96	-.64	4.51	6.18	1.16	2.91	4.58	-.44
U.S.	6.55	7.84	5.44	4.96	6.29	3.81	6.97	8.36	5.70	5.39	6.83	4.07
LEMONS:												
California	7.11	13.38	1.66	4.27	10.54	-1.18	10.08	16.40	.84	7.12	13.44	-2.12
Arizona	4.11	9.08	1.66	1.35	6.32	-1.10	8.61	15.20	.92	5.65	12.24	-2.04
U.S.	6.37	12.56	1.66	3.55	9.74	-1.16	9.82	16.20	.86	6.86	13.24	-2.10
TANGERINES:												
Florida	14.11	19.20	5.64	10.92	16.20	2.14	15.94	20.40	7.34	12.77	17.40	3.84
California	11.52	15.24	1.38	9.82	13.54	-.32	15.45	20.68	1.38	13.69	18.92	-.38
Arizona	12.24	14.84	1.38	10.54	13.14	-.32	15.20	17.78	2.26	13.44	16.02	-.50
U.S.	12.91	17.00	3.95	10.46	14.70	1.16	15.70	20.26	5.13	13.17	17.86	2.29
TANGELOS:												
Florida	6.16	8.10	5.21	3.72	5.70	2.76	7.78	10.00	6.68	5.35	7.60	4.23
LIMES:												
Florida	13.50	20.70	3.29	8.57	15.40	-1.11	17.93	25.80	2.56	12.69	20.12	-1.84

1/ P.H.D.--Packinghouse-door. 2/ Excludes Temples.

SOURCE: Agricultural Prices, NASS, USDA.

Table 19.--Frozen concentrated citrus juices: Cannery stocks, packs, imports, supplies, and movement, Florida, 1985/86-1987/88 season

Item and season	Carryin	Pack		Imports and other supplies 1/		Supply		Movement		Stocks 2/
		To date 2/	Total season	To date 2/	Total season	To date 2/	Total season	To date 2/	Total season	
1,000 gallons 3/										
Oranges:										
1985/86	48,348	132,406	132,406	68,684	82,719	249,438	263,473	198,251	226,478	51,187
1986/87	36,995	145,056	145,056	71,960	82,814	254,011	264,865	197,700	225,075	56,311
1987/88	39,790	169,973		58,322		268,085		211,665		56,420
Grapefruit:										
1985/86	3,387	24,162	24,162	1,776	2,011	29,325	29,560	23,250	26,138	6,075
1986/87	3,422	28,875	28,875	1,210	1,369	33,507	33,666	25,550	28,450	7,957
1987/88	5,216	31,906		1,342		38,464		25,158		13,306
Tangerine:										
1985/86	594	368	368	605	661	1,561	1,623	1,173	1,344	386
1986/87	279	373	373	463	98	1,115	750	993	660	121
1987/88	90	583		659		1,332		933		399

1/ Includes domestic receipts of non-Florida product; receipts of Florida product from non-members; reprocessed frozen concentrated tangerine juice; product received in fulfillment of futures contracts; chilled orange juice used for FCOJ; net loss or gain during reprocessing. 2/ For the 1987/88 season, week ending October 15; 1986/87, October 17, and 1985/86, October 18. These respective dates include data through the 46th week of each season. 3/ Orange and tangerine, 42.0 Brix; grapefruit, 40 Brix.

SOURCE: Florida Citrus Processors Association.



Table 20.--Canned citrus juices 1/: Canners' stocks, packs, supplies, and movement, Florida, 1985/86-1987/88 season

Item and season 2/	Beginning stocks	Pack	Total supply	Season movement	Ending stocks
1,000 cases, 24 No. 2's					
Orange: 3/					
1985/86	889	7,596	8,485	7,499	986
1986/87	986	8,122	9,108	8,084	1,024
1987/88	1,024	7,256	8,280	7,425	855
Grapefruit: 3/					
1985/86	1,287	9,948	11,235	9,721	1,514
1986/87	1,514	8,982	10,496	9,025	1,471
1987/88	1,471	7,724	9,195	7,871	1,324
Blend:					
1985/86	135	577	712	587	125
1986/87	125	533	658	532	126
1987/88	126	449	575	458	117

1/ Single-strength. 2/ Season beginning approximately October 1. 3/ Includes reconstituted juices.

SOURCE: Florida Citrus Processors Association.

Table 21.--Producer price indexes of selected dried and frozen items, by months, United States, 1985-88

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1982-84=100												
Dried fruit:												
Prunes												
1985	103.8	100.4	100.4	100.4	102.8	102.8	102.8	102.8	99.5	101.5	95.4	101.5
1986	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5
1987	101.5	101.5	101.9	101.9	101.9	101.9	105.5	105.5	105.5	106.5	109.6	109.6
1988	109.6	109.6	109.6	109.6	109.6	109.6	109.6	109.6	NA			
Raisins												
1985	69.5	69.5	69.5	69.5	71.2	NA	NA	NA	NA	77.5	77.5	77.5
1986	75.6	75.6	77.6	76.5	76.5	77.8	79.3	81.4	79.6	82.5	83.9	83.9
1987	83.9	83.9	83.9	83.9	83.9	83.0	83.9	83.9	82.2	82.2	86.4	88.2
1988	85.8	85.8	85.8	NA	88.2	88.2	88.2	NA	NA			
Frozen juice:												
Orange, conc.												
1985	127.3	133.1	133.2	132.9	133.5	132.4	130.5	126.0	123.9	119.3	114.9	112.8
1986	104.4	102.2	97.6	94.4	94.1	94.3	94.2	94.2	93.7	96.0	98.6	101.4
1987	106.9	106.9	107.4	109.5	109.7	110.0	110.1	111.0	110.6	110.6	117.2	129.9
1988	132.1	140.5	142.4	141.0	142.0	144.0	141.6	142.0	141.7			
Grapefruit, conc.												
1985	109.2	110.2	110.7	110.7	110.7	110.7	110.0	109.6	110.2	109.7	109.5	110.7
1986	109.6	108.8	110.0	110.8	110.8	110.8	110.8	110.8	111.6	112.6	113.4	112.8
1987	113.1	113.1	113.1	113.2	119.8	119.1	119.8	119.8	119.0	119.0	119.0	119.5
1988	119.4	117.9	117.9	117.9	117.9	115.3	115.8	115.8	116.3			

NA = not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

Table 22.--Monthly average price indexes for fruits, United States, September 1987-88

Item	1987	1988								
	Sept.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
(1982-84=100)										
Producer price index:										
Fresh fruit	107.5	109.2	104.2	106.8	102.7	113.6	112.2	115.0	108.7	119.0
Citrus fruit	129.2	131.6	130.1	127.9	128.0	144.1	150.3	152.0	152.0	151.8
Other fruit	99.6	101.1	94.9	99.2	93.5	102.6	98.5	101.7	93.1	107.2
Dried fruit	94.2	97.8	97.8	97.8	97.9	99.3	99.2	99.3	99.3	101.0
Canned fruit and juice	116.4	118.9	119.4	119.5	119.7	119.9	119.8	120.2	120.2	120.5
Canned fruit	113.5	113.8	114.0	113.8	113.7	114.2	114.1	114.8	114.7	114.8
Canned fruit juice	119.7	124.2	125.0	125.3	125.8	125.6	125.6	125.8	125.9	126.2
Frozen fruit and juice	112.9	125.4	130.2	131.1	130.1	130.9	131.8	130.5	130.9	130.6
Consumer price index:										
Fresh fruit	131.7	130.7	132.6	133.8	139.9	146.6	143.6	147.8	150.1	153.3
(1977=100)										
Index of fruit prices received by growers 1/	184	170	166	163	160	195	179	161	181	186

1/ Index for fresh and processed.

SOURCES: Bureau of Labor Statistics, U.S. Department of Labor, and Agricultural Prices, NASS, USDA.

Table 23.--Monthly average fruit prices received by growers, United States, October 1987-88

Commodity and unit	1987	1988									
	Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Apples for fresh use (cts./lb.)	.127	.114	.133	.128	.113	.111	.109	.197	.261	.251	.208
Pears for fresh use (\$/ton)	214.00	144.00	212.00	227.00	249.00	404.00	526.00	410.00	383.00	418.00	406.00
Peaches for fresh use (cts./lb.)	--	--	--	--	--	.415	.206	.194	.191	.229	--
Strawberries for fresh use (cts./lb.)	1.16	1.07	.756	.572	.404	.537	.456	.496	.550	.600	.500
Oranges: (\$/box) 1/											
Fresh use	13.99	7.54	6.78	6.92	7.81	10.89	11.43	9.52	8.02	6.72	9.40
Processing	-.33	5.30	6.22	5.80	6.51	7.77	7.86	.50	.50	.50	.51
All	10.42	5.64	6.30	6.24	6.80	8.26	8.43	6.46	4.92	4.17	5.48
Grapefruit: (\$/box) 1/											
Fresh use	9.83	6.48	6.63	6.18	5.92	6.12	6.13	8.21	7.44	8.16	11.45
Processing	2.15	4.71	4.79	4.57	3.99	2.09	-.42	-.39	-.38	-.38	-.29
All	8.58	5.63	5.45	5.02	4.92	4.53	3.36	4.85	4.09	7.34	7.57
Lemons: (\$/box) 1/											
Fresh use	14.55	6.70	7.95	10.91	11.52	13.04	17.04	19.24	21.20	21.77	17.16
Processing	-2.08	-2.09	-2.11	-2.12	-2.12	-2.12	-2.12	-2.12	-2.26	-2.12	-2.26
All	8.77	1.59	2.23	5.88	6.53	8.01	12.07	13.40	14.67	15.05	8.47
Tangerines: (\$/box) 1/											
Fresh use	24.50	14.51	17.18	16.83	18.50	12.62	9.82	9.82	--	--	--
Processing	.70	2.99	3.66	2.67	2.18	-.38	-.38	-.38	--	--	--
All	19.50	11.54	13.40	12.01	10.64	4.28	2.17	1.71	--	--	--

1/ Equivalent on-tree returns.

SOURCE: Agricultural Prices, NASS, USDA.



Table 24.--Fresh fruit: Retail price, marketing spreads, and grower-packer returns, per pound, sold in the Northeast, season average, 1985/86-1987/88 1/

Commodity, production area, and season 2/	Retail price	Marketing spreads		Grower-packer return (f.o.b. shipping point price) 2/	
		Absolute	Percent of retail price	Absolute	Percent of retail price
	Cents	Cents	Percent	Cents	Percent
Apples, Red Delicious, Washington:					
Oct.-June					
1985/86	71.1	34.7	49	36.4	51
1986/87	73.8	38.7	52	35.1	48
1987/88	68.0	43.5	64	24.5	36
Grapefruit, Florida:					
Nov.-Apr.					
1985/86	37.1	25.6	69	11.5	31
1986/87	41.9	29.5	70	12.4	30
1987/88	46.5	33.3	72	13.2	28
Lemons, California:					
Aug.-July					
1985/86	83.6	52.6	63	31.0	37
1986/87	82.0	53.2	65	28.8	35
1987/88	89.6	56.9	64	32.7	36
Oranges, navel, California:					
Dec.-May					
1985/86	51.2	32.2	63	19.0	37
1986/87	55.0	36.0	66	19.0	34
1987/88	59.6	39.7	67	19.9	33
Oranges, valencia, California:					
May-Nov.					
1985	55.9	36.0	64	19.9	36
1986	48.1	30.7	64	17.4	36
1987	63.6	42.3	67	21.3	33

1/ Season average prices are weighted averages (monthly average prices weighted by monthly arrivals in New York City). 2/ Adjusted to account for waste and spoilage incurred during marketing.

SOURCES: Bureau of Labor Statistics, Department of Labor, and Economic Research Service, USDA.

Table 25.--Fresh fruit: Retail price, marketing spreads, and grower-packer returns, per pound, sold in the North Central, season average, 1985/86-1987/88 1/

Commodity, production area, and season 2/	Retail price	Marketing spreads		Grower-packer return (f.o.b. shipping point price) 2/	
		Absolute	Percent of retail price	Absolute	Percent of retail price
	Cents	Cents	Percent	Cents	Percent
Apples, Red Delicious, Washington:					
Oct.-June					
1985/86	67.4	31.4	47	36.0	53
1986/87	74.3	39.0	52	35.3	48
1987/88	68.6	44.0	64	24.6	36
Grapefruit, Florida:					
Nov.-Apr.					
1985/86	40.8	29.6	72	11.2	28
1986/87	46.6	34.3	74	12.3	26
1987/88	48.9	35.4	72	13.5	28
Lemons, California:					
Aug.-July					
1985/86	89.5	58.4	65	31.1	35
1986/87	86.0	57.8	67	28.2	33
1987/88	104.0	71.3	69	32.7	31
Oranges, navel, California:					
Dec.-May					
1985/86	49.8	30.8	62	19.0	38
1986/87	53.6	35.0	65	18.6	35
1987/88	56.1	35.7	64	20.4	36
Oranges, valencia, California:					
May-Nov.					
1985	58.0	38.0	66	20.0	34
1986	52.3	34.9	67	17.4	33
1987	60.6	39.3	65	21.3	35

1/ Season average prices are weighted averages (monthly average prices weighted by monthly arrivals in Chicago). 2/ Adjusted to account for waste and spoilage incurred during marketing.

SOURCES: Bureau of Labor Statistics, Department of Labor, and Economic Research Service, USDA.

Table 26.--Exports of selected dried fruits and tree nuts by destination, United States, 1985/86-1987/88

Item and season 1/	Canada	Europe				Japan	Other	World
		West Germany	Other EC 2/	Other	Total			
Metric tons								
Prunes:								
1985/86	2,713	6,270	19,154	6,645	32,069	7,022	6,446	48,250
1986/87	3,136	7,506	20,021	7,626	35,153	9,120	7,018	54,427
1987/88	3,261	9,652	18,710	8,057	36,419	9,925	9,422	59,027
Raisins:								
1985/86	3,472	5,019	19,529	9,306	33,854	20,736	13,811	71,873
1986/87	3,105	7,696	26,613	10,131	44,440	19,249	13,722	80,516
1987/88	4,311	9,909	33,987	9,956	53,852	24,305	14,978	97,446
Shelled almonds:								
1985/86	2,581	37,843	30,589	10,575	79,007	15,322	39,402	136,312
1986/87	4,646	13,648	14,441	7,072	35,161	12,394	9,853	62,054
1987/88	2,688	40,581	34,826	11,710	87,117	14,256	23,552	127,613

1/ Season beginning August 1, for prunes and raisins, and July 1 for almonds. 2/ Belgium-Luxembourg, France, United Kingdom, Italy, Netherlands, Denmark, Ireland, Greece, Spain, and Portugal.

SOURCE: Foreign Agricultural Service, USDA.



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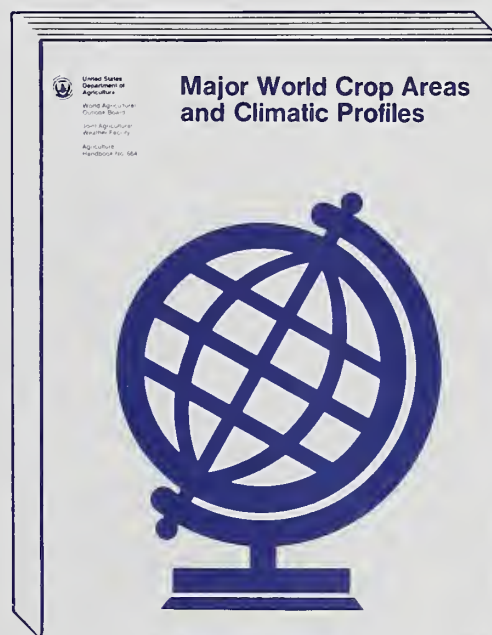
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